

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 98584

TO: Mark Navarro Location: 8A15 Art Unit: 1645

Friday, July 11, 2003

Case Serial Number: 10/091442

From: Barb O'Bryen

Location: Biotech-Chem Library

CM1-6A05

Phone: 308-4291

barbara.obryen@uspto.gov

Search Notes

7/14/93

O'Bryen, Barbara

From: Sent:

Navarro, Albert

Thursday, July 10, 2003 12:47 PM

To: Subject: O'Bryen, Barbara 10/091,442

Mark Navarro

1645 306-3225 8A15

Hello Barb,

Could I trouble you for a search and an interference search of:

SEQ ID NO: 1-9 and 34

Thanks

Mark



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Title:
Perfect score:
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Listing first 45 summaries
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ALIGNMENTS

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PRT; 380 AA. Created) Last sequence update) Lia; Sciurognathi; Muridae; Lia; Sciurognathi	OM N.A.		otation of	is A., Yoshida	Poyo-oka K., Wa	Sato K., Schoen	Ring B., Ringw	archionni L., M	S., Hill D., Ho	M.J., Bult C.,	offelli D., Boj	kido T., Furunc	., Staubli F.,	ewis S., Matsuc	W., Gaasterlan	Matsuda H.A., A	kazaki Y., Gojo	Izawa M., Nishi	Hara A., Fukun	hinagawa A., Sh	85660; PubMed=1	L/6J; TISSUE-SK	OM N.A.				Metazoa: Chorda	s (Mouse)	4631416M05RIK	ik protein (Meg	(TrEMBLrel. 21	(Tremburel 17	i !	PRELIMINARY;	
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			h mouse cDNA cc	Y., Kawaji H.,	tz C., Whittake	a T., Shibata Y	iguez I., Sakam	azzarelli J., N	me D.A., Kamiya	Fujita M., Gar	ninci P., de Bo	, Baldarelli R.	omita M., Wagne	I., Pesole G.,	C., King B., Ko	Batalov S., Ca	o H., Kasukawa	а н., Kondo S.,	no н., Adachi J	shino M., Itoh						٠.					ation update)	nce undate)		80 AA.	

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Mammalia; Eutheria; Rodentia:
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PROSITE; PS00284; SERPIN; UNKNOWN_1.

SEQUENCE 380 AA; 43050 MW; C9240272BCFB9CF4 CRC64;
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MGD; MGI:2151053; Serpinb7.
InterPro; IPR000215; Serpin.
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                                                          M-T6 protein.
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Yagi M., Nagano N., Inagi R., Kurokawa
"Cloning of rodent megsin revealed its
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Nangaku M., Miyata T., Suzuki D., Umezono T., Hashimo
Yagi M., Nagano N., Inagi R., Kurokawa K.;
"Cloning of rodent megsin revealed its up-regulation
      Viruses;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cameron C., Hota-Mitchell.S., Chen L., Barrett Macaulay C., Willer D., Evans D., McFadden G.; Submitted (JUL-1999) to the EMBL/GenBank/DDBJ EMBL; AF170726; AAF15052.1; -. EMBL; AF170726; AAF14993.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9PX36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cameron C., Hota-Mitchell S., Chen L., Barrett Macaulay C., Willer D., Evans D., McFadden G., "The complete DNA sequence of myxoma virus."; Virology 264:298-318(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=LAUSANNE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Myxoma virus (strain La
Viruses; dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   M006L protein.
M006L OR M006R.
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                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000210; BTB_POZ.
InterPro; IPR000875; Cecropin.
InterPro; IPR001798; Kelch.
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01-MAY-2000
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12; Conserv
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ses, no RNA
                                                                                                                  51.5%;
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17,
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HLEDTRRNIN 18
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                                                                                                                        Score 51.5;
Pred. No. 5
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iden G.;
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Q9BYF8;
Q1-JUN-2001
Q1-JUN-2001
Q1-JUN-2002
                                                                                                                                                                                                                                        Gloeckner G., Eichinger L., Szafranski K., Pachebat J., Dear P., Lehmann R., Baumgart C., Parra G., April J.F., Guigo R., Kumpf K. Tunggal B., Cox E., Quail M.A., Platzer M., Rosenthal A., Noegel Sequence and Analysis of Chromosome 2 of Dictyostelium.", Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AC115594; AAL92302.1; -. Hypothetical protein.

SEQUENCE 2020 AA: 232615 MW; 01E221CE63114DD3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical 232.6 kDa protein.
Dictyostellum discoideum (Slime mold).
Eukaryota; Mycetozoa; Dictyostellida; Dictyostelium.
NCBI_TaxID-44689;
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SMART; SM00093; SERPIN; 1.
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Mammalia; Eutheria;
NCBI_TaxID=9606;
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Suminami Y., Kishi F.,
"Novel Forms of SCC An"
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tigen Transcripts
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Pred. No. 42;
3; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5AB9CEF480C1ABDF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sakaguchi Y.,
lpts Produced
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Q09657
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Best Local S
Matches
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EMBL; 24693; CAA87047.1; -
WORMPEP; XK1320.9; CEO1707.
InterPro; IPR003702; AcetylCoA_hydro.
InterPro; IPR001220; Lectin_LegB.
Pfam; PF02550; AcetylCoA_hydro; 1.
Pfam; PF02550; AcetylCoA_hydro; 1.
PROSITE; PS00307; LECTIN_LEGUME_BETA; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mulenga A., Sugimoto C., Onuma M.;

"Blood meal feeding-induced serine proteinase inhibito
Rhipicephalus appendiculatus.";

Submitted (MAY-2001) to the EMBL/GenBank/DDBJ database;
EMBL; AY035780; AAK61376.1; -.

InterPro; IPR000215; Serpin.

Pfam; PF00079; serpin; 1.

SMART; SM00093; SERPIN; 1.

PROSTITE; PS00284; SERPIN; 1.

PROSTITE; PS00284; SERPIN; 1.

SEQUENCE 380 AA; 42729 MM; 762B7C44EIF61IF2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rhipicephalus appendiculatus (Brown ear tick).
Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida;
Parasitiformes; Ixodida; Ixodidae; Rhipicephalus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              O8WQXO;
O1-MAR-2002 (TrEMBLrel. 20,
O1-MAR-2002 (TrEMBLrel. 21,
O1-JUN-2002 (TrEMBLrel. 21,
Serine proteinase inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Nematoda; Chromadorea;
Rhabditidae; Peloderinae; Caenorhabditis.
NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JAN-1999 (TrEMBLrel. 09, Created)
01-JAN-1999 (TrEMBLrel. 09, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Hypothetical 51.4 kDa protein ZK1320.9 in chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (DEC-1994) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Caenorhabditis elegans.
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SEQUENCE 4:
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                                                                                                                                               DFTNHLEDTRRN 16
                                                                                                                                                                                                                                                                                       472 AA;
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44.4%;
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66.7%;
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                                                                                                                                                                                                               Score 48;
Pred. No.
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Pred. No. 14;
                                                                                                                                                                                                                                                                                       08C3351E11B7C348 CRC64;
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Rhabditida; Rhabditoidea;

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                                                                                             Martindale D.W., Koop B.F.;
Submitted (JAN-1998) to the EMBL/GenE
EMBL; AF041059; AAB96784.1; -.
EMBL; AF041055; AAB96784.1; JOINED.
EMBL; AF041056; AAB96784.1; JOINED.
EMBL; AF041056; AAB96784.1; JOINED.
EMBL; AF041058; AAB96784.1; JOINED.
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043611;
01-JUN-1998 (Tr
01-JUN-1998 (Tr
01-JUN-2002 (Tr
Probable CLIP F
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08XM42;
01-MAR-2002
01-MAR-2002
01-MAR-2002
                                                                                                                                                                                     SEQUENCE FROM N.A.

MEDLINE-96411691; PubMed-8812460;

MEDLINE-96411691; PubMed-8812460;

Osborne L.R., Martindale D.W., Scherer S.W., Shi )

Heng H.H.Q., Costa T., Pober B., Lew L., Brinkman Roop B.F., Tsui L.-C.;

"Identification of genes from a 500-kb region at commonly deleted in Williams syndrome patients.";

Genomics 36:328-336(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical protein; SEQUENCE 245 AA; 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shimizu T., Ohtani K., Hirakawa H., Shiba T., Ogasawara N., Hattori M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacteria; Firmicutes; Bacillus/Clostridium Clostridiales; Clostridiaceae; Clostridium
                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                PROSITE; PS00845; CAP_GLY_1; UNKNOWN_2
                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Complete genome sequence of flesh-eater.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PubMed=11792842;
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                                                                                      InterPro;
                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                         Pro; IPR000938; CAP-Gly.
PF01302; CAP GIV.
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(TrEMBLrel. 21, Last annotation update)
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Primates;
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  Score 47;
Pred. No.
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ori M., Kuhara S.,
Clostridium perfri
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Catarrhini;
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229703EAC24770D2 CRC64;
                                 547CA46012255C25 CRC64;
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22;
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i; Hominidae;
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lnkman J., Ro
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01-OCT-2001
01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q25586
Q25586;
                                                                                                                                                               "Prediction of the coding seques to the EMBL; AB006629; BAA22960.2; "InterPro, IPR000938; CAP-Gly."
                                                    SEQUENCE
                                                                             Pfam; PF01302;
                                                                                                                              Ohara O., Nagase T.,
                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                         014527;
                                                                                                                                                                                                                                                014527
                                                                                                                                                                                                                                                                                                                                                                                                           "Characterization of Onchocerca gibsoni."
                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLINE=96360163; PubMed=8719949;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Nematoda; Chromadorea; Spirurida; Onchocercidae; Onchocerca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-JUN-2001 (TrEMBLrel. 17,
                                                            NON_TER
                                                                   PROSITE;
                                                                                                                                      TISSUE-BRAIN;
                                                                                                                                                                                                      KIAA0291 protein
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InterPro; IPR000727; T_SNARE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Onchocerca gibsoni
                                                                                                                                                              NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                    NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                             Zhang D., Miller D.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Paramyosin-related protein
                                                                                                                                                                                                                                                                                                                                                                                                    Int. J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=6284;
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                 Similarity
8; Conserv
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9; Conservative
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                                                                   PS00845; CAP_GLY_1; UNKNOWN_2.
ERVDFTNHLEDTRRNI 17
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O9UDT6;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-JUN-2000 (TrEMBLrel. 21, Last annotation update)
O1-JUN-2001 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                      Q9Z0H8;
Q9Z0H8;
Q1-MAY-1999
Q1-MAY-1999
Q1-JUN-2002
CLIP-115.
                  MEDLINE-99017971; PubMed-9799601;
Hoogenrand C.C., Eussen B.H.J., Langeveld A., van Haperen R.,
Winterberg S., Wouters C.H., Grosveld F., de Zeeuw C.I., Galjart N.;
"The murine CYLN2 gene: genomic organization, chromosome localization,
and comparison to the human gene that is located within the 7q11.23
Williams syndrome critical region.";
Genomics 53:348-358(1998).
EMBL; AJ228865; CAA13069.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bemis G., Langston Y., "The sequence of Homo: Submitted (JUN-1998) to
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MEDLINE=99063792; PubMed=9847074;

Sulston J.E., Waterston R.;

"Toward a complete human genome s
Genome Res. 8:1097-1108(1998).
                                                                                                                                                                                                             STRAIN-129;
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Mammalia; Eutheria;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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InterPro; IPR000938; CAP-G1;
Pfam; PP01302; CAP-GLY; 2.
PROSITE; PS00845; CAP-GLY 1; UNKNOWN_2.
SEQUENCE 1046 AA; 115837 MW; 7A0B3C796E1C6E25 CRC64;
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AC005015; AAF03524.1; -.
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Rodentia;
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sapiens BAC clone GS1-166C5.";
to the EMBL/GenBank/DDBJ databases
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Catarrhini;
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MEDLINE-98087115; PubMed-9427243;

A de Zeeuw C.I., Hoogenraad C.C., Goedknegt E., Hertzberg E.,

A de Zeeuw C.I., Hoogenraad C.C., Goedknegt E., Hertzberg E.,

A Neubauer A., Grosveld F.G., Galjart N.J.;

T "CLIP-115, a novel brain specific cytoplasmic linker protein

T the localisation of dendritic lamellar bodies.";

L Neuron 19:1187-1199(1997).

R EMBL; AJ000485; CAA04123.1; -.

R EMBL; AJ000485; CAA04123.1; -.

R InterPro; IPR000938; CAP-GLY.

R Pfam: PF01302; CAP-GLY: 2.

R PFAM: PF01302; CAP-GLY: 2.

R PROSITE; PS00788; TFIIB; UNKNOWN_2.

SEQUENCE 1046 AA; 115480 MW; 72E6CE9F76D2A1D0 CRC64;
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055156;
01-JUN-1998 (TrEMBLrel. 0)
01-JUN-1998 (TrEMBLrel. 0)
01-JUN-2002 (TrEMBLrel. 2
CLIP-115 protein.
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Mammalia; Eutheria; Rode
NCBI_TaxID=10116;
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ps00845; CAP_GLY; 1; UNKNOWN_1.
ps00782; TFIIB; UNKNOWN_1.
1046 AA; 115494 MW; A2B9C2
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                              and is derived by analysis of the total score distribution.
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1 SYIEVTEEGTEATA
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232.223 Million cell updates/sec
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AAB26142
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AAR57110
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AAU39055
AAB55764
AAU16928
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Mouse megsin prote
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379 379 389 400	380 116 188 372 376	400 1120 392 424 431 380 380	391 391 400 400	368 368 379 617 135 316 391
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AARB4159 AAR94367 AAR94367 AAU02973 AAU02962	AAB83076 AAU02921 AAU02923 AAU02963 AAB865309 AAB8653176 AAB851176	ABB/494/ ABG28279 ABB67205 ABB67206 ABB64428 AAB864428 AAV08255 AAG64286	10004114	AAB24151 AAB83077 AAY15155 AAY15156 AAY72661 AAY72664 AAY41029 AAY25926
Human elastase inh Human elastase inh Angiotensin conver Angiotensin conver	megsin protiotensin con iotensin con iotensin con iotensin con combin inhibi	Novel human diagno Drosophila melanog Drosophila melanog Drosophila melanog Drosophila melanog Rat megsin protein Rat megsin protein	n lung n seri n seri n head n lung n lung n lung	Mouse megsin prote Murine megsin prot Human prostate ser Human prostate ser Human headpin (for Human serine prote Human lung tumor a Human hurpin prote

ALIGNMENTS

Human megakaryocyte differentiation factor.

16-AUG-1994

(first entry)

AAR48379 standard; Protein; 380 AA

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ARASULT 1
ARABOLT 1
ARABOLT AR
                                                                                                                           Ishida N, In
Tsujimoto M,
WPI; 1994-058782/08
N-PSDB; AAQ56670.
                                                                                                                                                                                                                                                                                                                                                                                                     17-JUL-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EP583884-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                                                                                                                                                                     (SUNR ) SUNTORY LTD. (TSUJ/) TSUJIMOTO M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-FEB-1994
                                                                                                                                Iwasa F, Kuri
M, Tsuruoka N,
                                                                                                                                                                                                                                                                                                                                                                                                 92JP-0212305
93JP-0067339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93EP-0305654
                                                                                                                                Kurihara T, Miura K, Nakazato
ka N, Yamaguchi N, Yamaichi K;
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RESULT 2
AAY08254
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N-PSDB; AAX56712.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human MDF can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietin making it useful for treatment of diseases involving a decrease in platelet number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New megakaryocyte differentiation epidermoid carcinoma cells, used t decrease in platelets
                                              Sequence
                                                                          This invention describes the isolation of novel megsin nucleic acid a proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangia
                                                                                                                                    Claim
                                                                                                                                                        Megsin protein expressed specifically in
                                                                                                                                                                                                             Miyata T;
                                                                                                                                                                                                                                                                                                              01-APR-1999
                                                                                                                                                                                                                                                                                                                                   WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                        Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55-57kD SDS-PAGE and exhibits an isoelectric point of 6.0-7.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim
                                                                   cells, such as
                                                                                                                                                                                                                                   (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                 22-SEP-1997;
                                                                                                                                                                                                                                                                                       22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                      Megsin;
                                                                                                                                                                                                                                                                                                                                                                                                                                  14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                             human;
                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                325 SYIEVTEEGTEATAATG 341
                                                                                                                                  1; Page 62-64; 100pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                            megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7; Page 30-32; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                            rat; murine.
   . Similarity
17; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        factor - isolated from human to treat conditions involving
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DB 2v,
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5.7e-05;
thes 0;
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                      Length 380;
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RESULT 4
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                                                                                      Query Match
Best Local S
Matches 17
                                                                                                                                                   described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising:
(a) antimegsin protein antibody attached to solid magnetic particles;
(b) direct or indirect fixing for the antibody to the particles; and
(c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsing protein, which is given in the exemplification of the present invention
                                                                                                                                                                                                                                                    The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IgA; immunoglobulin A; detect:
diagnosis; biological sample;
                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                     Example 2;
                                                                                                                                                                                                                                                                                                        biological
                                                                                                                                                                                                                                                                                                                   Evaluating
                                                                                                                                                                                                                                                                                                                                          N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                          Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                             (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                        (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                         19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-MAR-2000; 2000WO-JP01646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Megsin; mesangium-predominant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human megsin protein sequence
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                                                                1 SYIEVTEEGTEATAATG
                                                                                      Similarity
17; Conserv
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                                            renal function sample -
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                                                                                                                                                                                                                                                                                     Page 66-69;
                                                                                                                                                                                                                                                                                                          sample
                                                                                       Conservative
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99JP-0306623
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                                                                                                100.0%;
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renal function; renal disorder;
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5.7e-05;
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AAB83075 standard;

Protein; 380

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is human megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is used for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-300136/31.
N-PSDB; AAF82438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Miyata
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                                                                                                                                             Homo
                                                                                                                                                                                         Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                                                                                                                                                                                                                                            16-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 4; Page 44-46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200124628-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transgenic
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                         Misc-difference
                                                                                                                                                                                                                                                                                         Human megakaryocyte
                                                                                                                                                                                                                                                                                                                                                                                            AAR57110
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR57110 standard; peptide; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mouse model for mesangial cell proliferative nephritis for development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                    Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      screening of new treatments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
17; Conserv
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note-
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"not determined"
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                                             determined"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 83; DB zz; ...
Pred. No. 5.7e-05;
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                                                                                                                                                                                                                                                                                         factor
                                                                                                                                                                                                                                                                                         peptide
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RESULT 6
AAY29329
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PRX TXX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoletin making it useful for treatment of diseases involving a decrease in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol. wt. 55-57kD by SDS-PAGE, exhibits an isoelectric point of 6.0-7.0 and contains an amino acid sequence comprising at least one of the sequences AAR57107-R57115.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SUNR )
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY29329;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human MDF (see AAR48379) can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New megakaryocyte differentiation epidermoid carcinoma cells, used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUL-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                         haematopoiesis regulation; chemotactic; chemokinetic;
                                                                                                                                                                                                                                                                                                        differentiation;
                                                                                                                                                                                                                                                                                                                                                                                                                            29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1994-058782/08
20-JAN-1999;
                                            21-JAN-1999;
                                                                                                                                          WO9937674-A1
                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                  tumour invasion
                                                                                                                                                                                                                                                                                                                              Human; secreted protein; nutrition; cytokine; cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                             Human secreted protein clone it217_2 protein sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY29329
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tsujimoto M,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-JUL-1993;
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TSUJIMOTO M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YIEVTEEGTEAXAAXG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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93JP-0067339
99US-0235609
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                                            99WO-US01404
                                                                                                                                                                                                                                                      immune stimulating; vaccine; suppression; gene therapy;
egulation; tissue growth; activin; inhibin; cadherin;
mokinetic; haemostatic; thrombolytic; anti-inflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "not determined"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.1%;
87.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          z
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Yamaguchi N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 69;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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to treat
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Yamaichi K;
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es 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            from
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RESULT 7
AAU39055
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Best Local S
Matches 13
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Jacobs K,
Treacy M,
                                                                                                                                                                                                          cytostatic; antidiabetic; virucide; antiinfertility; anticonvulsant; vasotropic; antiparkinsonian; immunostimulant; dermatological; antirheumatic; antitumor; antiulcer; osteopathic; tranquiliser; cerebroprotective; cytokine; cell proliferation; cell differentiation; immune deficiency; severe combined immunodeficiency; SCID; tumour; autoimmune disorder; multiple sclerosis; rheumatoid arthritis;
                                                                                                                                                                graft-versus-host disease; myeloid deficiency; wound healing; ulcer; periodontal disease; osteoporosis; osteoarthritis; Alzheimer's disease; Parkinson's disease; Huntington's disease; infection; cardiac disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a human secreted protein. Human secre protein polynucleotides and proteins are predicted to have biological activities which would make them suitable for treating, preventing or ameliorating medical conditions in humans and animals, although no supporting data is given. Suggested activities include nutritional activity, cytokine and cell proliferation/differentiation activity, limnune stimulating (e.g. as vaccines) or suppressing activity,
           22-MAR-2001; 2001WO-US09369
                                           11-OCT-2001
                                                                          W0200175068-A2
                                                                                                                                                                                                                                                                                                         Human; secreted protein; antiinflammatory; immunosuppressive;
nootropic; neuroprotective; antiarthritic; antimicrobial; vulnerary;
                                                                                                                                                                                                                                                                                                                                                          Human
                                                                                                                                                                                                                                                                                                                                                                                                                       AAU39055;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAU39055 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and thrombolytic activity, receptor/ligand activity, anti-inflammatory activity, cadherin/tumour invasion suppressor activity, and tumour inhibition activity. The polynucleotides are also stated to be useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              haematopoiesis regulating activity, tissue growth activity, haemostatic activiny. Inhibin activity, chemotactic/chemokinetic activity, haemostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polynucleotides encoding secreted human proteins derived e.g. fetal brain potentially used as immunostimulators
                                                                                                                                                   stroke; sepsis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                          secreted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ĭ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page 119-120; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          217
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Lavallie
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                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                        protein it217_2.
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                                                                                                                                                   inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein; 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           83.1%;
76.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Collins-Racie LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              мсСоу Jм,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 69;
Pred. No.
                                                                                                                                                    bowel disease;
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A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; DB 20;
. 0.0049;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Steininger RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                 disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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C
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RESULT 8 ABB55764

ABB55764 standard; Protein; 217

A A

0

Human polypeptide SEQ ID NO 134.

14-FEB-2002

(first entry)

Human; clone bd306-7; clone yb8-1; ATCC number 98599; gene therapy; immune disorder; bacterial infection; fungal infection; cancer; tumour; autolimnune disorder; systemic lupus erythematosus; wound; ulcer; inhibit osteoporosis; osteoarthritis; nervous system disorder; neuropathy; Alzheimer's disease; Parkinson's disease; Huntington's disease; activin haemophilia; cardiac infarction; stroke; sepsis; arthritis; vulnerary; ischaemia-reperfusion injury; inflammatory bowel disease; chemotactic; ischaemia-reperfusion injury; inflammatory bowel disease; chemotactic;

activin; inhibin;

Crohn's disease;

cytostatic; anti-inflammatory; immunomodulator; haemostatic; thrombolytic; anti-inflammatory.

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The invention relates to novel human secreted proteins, the nucleic coids encoding them. The protein may exhibit cytokine, cell proliferation correctly differentiation activity or may induce production of other cytokines in certain cell populations and may exhibit immune stimulating or immune suppressing activity, which is useful for the treatment of various immune deficiencies and disorders e.g. severe combined communedeficiency (SCID), autoimmune disorders e.g. multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation. The proteins are also useful in the treatment of diseases and disorders including tissue, skin and organ transplantation and in graft-versus-host diseases (GVHD), in the induction of tumour immunity, myeloid or lymphoid cell deficiencies, wound healing and tissue repair, in flammatory processes, incisions and ulcers; as well as in treatment of periodontal disease, osteoporosis or osteoarthritis, mediated by inflammatory processes, diseases of the peripheral nervous system, ce amylotrophic lateral sclerosis, and Shy-Drager syndrome, infections, infarction of cardiac and central nervous system vessel e.g. stroke, sepsis, inflammatory bowel disease, ulcers, bone regeneration. The proteins and nucleic acids are also useful as food supplements. The proteins and nucleic acids are also useful as food supplements. The present sequence represents a secreted protein of the invention.
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                                Š
                                                                                                                                       Matches
                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jacobs
Treacy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Secreted human proteins, useful as vaccine for treating various diseases such as autoimmune disorders (e.g. multiple sclerosis), nervous system disorders (e.g. stroke) -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-MAR-2000; 2000US-0539330.
04-DEC-2000; 2000US-0729674.
                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 546-547; 619pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clark
                                                                                      Local
 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ) GENETICS
                                1 SYIEVTEEGTEATAATG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        z z
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                                                                                     Similarity
Fechtel
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                                                                    Conservative
                                                                                                                                       AA;
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                                                                                     83.1%;
76.5%;
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J, Steininger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Merberg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (e.g. stroke)
 176
                                                                  ω,
                                                                                   Score 69;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ö
                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Collins-racie LA,
er RJ, Spaulding V,
                                                                                   DB 22;
0.0049;
                                                                                                     Length 217
                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Evans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wong
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                                                                  0;
                                                                  Gaps
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CC The invention relates to isolated polynucleotides (ABA90876-ABA90980) and encoded proteins (ABB55690), especially CABA90980) and encoded proteins (ABB55690). ABB55800), especially CC polynucleotides SEQ ID NO 1 (ABB55690 ABB55800). Polynucleotides SEQ ID NO 19 (ABB95885) and CC clones bd306-7 and yb8-1 respectively and the clones bd306-7 and yb8-1 care deposited with the American Type Culture Collection (ATCC) with CC arcession number 98599. The polynucleotides and encoded polypeptides have CC cytostatic, anti-inflammatory, immunomodulator, vulnerary, cc neuroprotective, activin, inhibin, chemotactic, haemostatic, thrombolytic and atti-inflammatory activity and acting as cytokine modulators. CC haematopolesis regulators, tissue growth modulators and/or cadherin cc suppressors. The polypeptides and polynucleotides are useful in gene ctheraples, particularly for preventing, treating or ameliorating any of the following diseases: immune deficiency and disorders; e.g. bacterial cor fungal infections, autoLumnune disorders, cancer, systemic lupus crythematosus or graft-versus-bost disease; myeloid or lymphoid cell costeoarthritis; central and peripheral nervous system diseases and CC disease, e.g. Alzheimer's, Parkinson's disease, Huntington's contral corpolities, e.g. Alzheimer's, Parkinson's disease, Huntington's corpolities, entral sclerosis or Shy-Drager syndrome; corpones systemic liflammatory response syndrome. Inflammatory response syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-APR-1997;
04-DEC-1997;
20-DEC-1997;
20-DEC-1998;
02-JAN-1998;
07-JAN-1998;
13-JAN-1998;
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30-JAN-1998;
18-FEB-1998;
30-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jacobs K,
Merberg E
Wong GG,
haemophilia, cardiac infarction on or systemic inflammatory response injury, endotoxin lethality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New secreted proteins and encoding polynucleotides, useful in therapies, particularly for preventing or treating autoimmune disorders, cancer, graft-versus-host disease, wound, osteoporostroke or inflammations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (JACO/)
(MCCO/)
(LAVA/)
(COLL/)
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(STEI/)
(SPAU/)
(WONG/)
(CLAR/)
(FECH/)
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(TREA/)
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// LAVALLIE E R.
// COLLINS-RACIE L
) EVANS C.
) MEDDING
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DB; ABA90942.
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TREACY M.
J.
AGOSTINO M J.
STEININGER R J.
SPAULDING V.
WONG G G.
CLARK H.
FECHTEL K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D, Treacy M,
Clark H, Fe
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97US-067434P.
97US-068379P.
98US-070346P.
98US-077054P.
98US-071304P.
98US-072134P.
98US-073038P.
98US-075038P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fechtel K;
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Agostino MJ,
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syndrome, ischaemia-repertusion ritis, inflammatory bowel disease or
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Steininger RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                wound, osteoporosis,
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AAU16928
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Best Local
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18 APR-2000
19-MAY-2000
07-JUN-2000
30-JUN-2000
07-JUL-2000
07-JUL-2000
11-JUL-2000
11-JUL-2000
11-JUL-2000
14-JUL-2000
14-AUG-2000
                                                                                                                                                                                                                                                            31-JAN-2000;
04-FEB-2000;
24-FEB-2000;
02-MAR-2000;
16-MAR-2000;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; opthalmalogical; vulnerary; secreted protein; rheumatoid arthritis; hyperproliferative disorder; cardiovascular disorder; cardiovascular disorder; cerebrovascular disorder; cerebral ischaemia; anglogenesis; nervous system disorder; Rizheimer's disease; infection; ocular disorcerence infection; wound healing; epithelial cell proliferation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Crohn's disease;
                                                                                                                                                                                                                                                                                                                                     17-JAN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunosuppressive;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SYIEVTEEGTEATAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217
                              2000US-0186350.
2000US-019874.
2000US-0190076.
2000US-0198123.
2000US-0214886.
2000US-0214886.
2000US-0214886.
2000US-021488.
2000US-021487.
2000US-0218290.
2000US-0218290.
2000US-0218290.
2000US-0229963.
2000US-0229964.
2000US-0228513.
2000US-0228513.
2000US-0228514.
2000US-02285214.
2000US-02285267.
2000US-02285267.
2000US-02285267.
2000US-02285267.
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                                                                                                                                                                                                                                                                                                                                                                                                                      food
                                                                                                                                                                                                                                                                                             2000US-0180628
2000US-0184664
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                                                                                                                                                                                                                                                                                                                                                                                                                     additive;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein,
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76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiarthritic;
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Pred. No. 0.00
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                    preservative;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340
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0.0049;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antirheumatic;
                                                                                                                                                                                                                                                                                                                                                                                                                     antiproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 217;
                                                                                                                                                                                                                                                                                                                                                                                                                             ection; ocular disorder; proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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The invention relates to isolated nucleic acid molecules and their CC encoded secreted proteins. The nucleic acids and proteins are used to CC prevent, treat or ameliorate a medical condition in e.g. humans, mice, CC rabbits, goats, horses, cats, dogs, chickens or sheep. They CC are also used in diagnosing a pathological condition or susceptibility CC to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in CC immunosorbant assays (ELISA). Disorders which are diagnosed or treated cinclude autoimmune diseases e.g. rheumatoid arthritis, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. corneal infection, and many other conditional conditions caused by bacteria, viruses and funging and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to cregenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities, fat content, lipid, protein, carbohydrate, vitamins, mice, carbohydrate, vitamins, and carbohydrate, vitamins, and carbohydrate, vitamins, cofactors and other nutritional components. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-NOV-2000
17-NOV-2000
17-NOV-2000
01-DEC-2000
01-DEC-2000
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activity of
haemophilia
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17-NOV-2000;
17-NOV-2000;
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17-NOV-2000;
17-NOV-2000;
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17-NOV-2000;
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17-NOV-2000;
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DB; AAS26833.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                polypeptides and polynucleotides useful as diagnostic reagents ose diseases or disorders associated with aberrant expression or top polypeptides, for treating blood clotting disorder,
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                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ
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2000US-0249210

2000US-0249210

2000US-0249211

2000US-0249213

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2000US-0249216

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2000US-02511869

2000US-0251189
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                                                                                                                                                                                                                                                                                                                                                                                                                  601pp; English.
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2000US-0235836. 2000US-0236327. 2000US-0236367. 2000US-0236368.

29-SEP-2000, 29-SEP-

2000US-0236802 2000US-0237037 2000US-0236369 2000US-0236370

14-SEP-2000; 21-SEP-2000; 21-SEP-2000; 25-SEP-2000; 25-SEP-2000; 26-SEP-2000; 27-SEP-2000; 27-SEP-2000; 29-SEP-2000; 29-SEP-2000; 29-SEP-2000;

2000US-0234998. 2000US-0235484. 2000US-0235834.

2000US-0234223. 2000US-0234274. 2000US-0234997.

12-SEP-14-SEP-14-SEP-

14-SEP

2000US-0231414 2000US-0232080 2000US-0232081 2000US-0231968 2000US-023197 2000US-0232399 2000US-0232399 2000US-02323400 2000US-0232401 2000US-0232401 2000US-0233063

-2000 2000

14-SEP-14-SEP-

22 - AUG22 - AUG22 - AUG22 - AUG23 - AUG23 - AUG23 - AUG23 - AUG20 - SEP01 - SEP01 - SEP01 - SEP05 - SEP05 - SEP06 - SEP06 - SEP08 - SEP08 - SEP08 - SEP08 - SEP-

2000US-0229513. 2000US-0230437. 2000US-0230438. 2000US-0231243. 2000US-0231243. 2000US-0231244. 2000US-0231244.

2000;

2000US-0226681 2000US-0227868 2000US-0227182 2000US-0227192 2000US-0229924 2000US-0229924 2000US-0229343 2000US-0229344 2000US-0229344 2000US-0229345 2000US-0229345

02-OCT-2000 02-OCT-2000 02-OCT-2000 02-OCT-2000 13-OCT-2000 20-OCT-2000 20-OC

2000US-0237039 2000US-0237039 2000US-0237040 2000US-0239935 2000US-0239937 2000US-0241921 2000US-0241785 2000US-0241787 2000US-0241787 2000US-0241787 2000US-0241808 2000US-0241808 2000US-0241809 2000US-0241809 2000US-0241819

2000US-0246474 2000US-0246475 2000US-0246476 2000US-0246477 2000US-0246677 2000US-0246523 2000US-0246524 2000US-0246525 2000US-0246527 2000US-0246528 2000US-0246528 2000US-0246528 2000US-0246532 2000US-0246610 2000US-0246610 2000US-0246611 2000US-0246611

Best Local Similarity

Score 69; pred. No.

DB 22;

Length 340;

Query Match

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AAYO8256
ID AAYO8
AAY AAYO8
AC MUSG
FT Prote
FT PR C2-SE
FT M1951
AC CTAin
FT Megsi
CC Protis
CC Protis
CC Specti
CC Spect
RESULT 11
AAB24151
ID AAB24
XX
AC AAB24
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AC AAB24
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AC AOJA
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AC MOUSE
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                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KURO/)
                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 76-79; 100pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-276983/23
N-PSDB; AAX56714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09915652-A1
            Mouse megsin
                                            30-JAN-2001
                                                                          AAB24151;
                                                                                                     AAB24151 standard; Protein; 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Megsin protein expressed specifically in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             numan;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY08256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY08256 standard; Protein;
                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               283
                                                                                                                                                                                                                                          14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KUROKAWA K.
MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mesangial cell; treatment; diagnosis; disease; IgA nephropathy;
                                                                                                                                                                                               SYIEVTEEGTEATAAT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SYLDVSEEGTEAAAATG
                                                                                                                                                                                SFIEVSEEGTEATAAT 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SYIEVTEEGTEATAATG
                                                                                                                                                                                                                                                                                                      368
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
              protein sequence
                                          (first entry)
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1..368
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                                                                                                                                                                                                                                                       83.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "partial sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17
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                                                                                                                                                                                                                                         Score 69;
Pred. No.
2; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
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              SEQ
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              ID NO:21
                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                        DB 20;
0.009;
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                                                                                                                                                                                                                                                                       Length 368;
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                                                                                                                                                                                                                                                                                     RESULT 12
AAB83077
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Best Local Similarity
                                                                                                                                                                                                                                                                     AAB83077 standard; Protein; 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Evaluating biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-611642/58
N-PSDB; AAC55239.
            06-OCT-2000; 2000WO-JP06988
                                                                       WO200124628-A1
                                                                                                   Mus musculus
                                                                                                                                Mouse; megsin;
transgenic mou
                                                                                                                                                                                Murine
                                                                                                                                                                                                            10-JUL-2001
                                                                                                                                                                                                                                         AAB83077;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miyata T;
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(FUSO ) FUSO PHARM IND LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-SEP-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus.
                                          12-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                            14;
                                                                                                                                                                            megsin
                                                                                                                                                                                                                                                                                                                                                 SFIEVSEEGTEATAAT
                                                                                                                                                                                                                                                                                                                                                                            SYIEVTEEGTEATAAT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   renal function comprises assaying sample -
                                                                                                                                  mouse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368 AA;
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-JP01646
                                                                                                                                                                            protein
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99JP-0306623
                                                                                                                                                                                                                                                                                                                                                                                                                          83.1%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                 328
                                                                                                                                                                                                                                                                                                                                                                                                            <u>ب</u>
                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
```

megsin protein 5

renal function; and (2) a kit for detecting megsin protein comprising:
(a) antimegsin protein antibody attached to solid magnetic particles;
(b) direct or indirect fixing for the antibody to the particles; and
(c) a magnet. The process is useful for evaluating renal function and
diagnosing renal disorders by assaying megsin protein in biological
samples (preferably urine or blood). The process is reproducible and
gives accurate results. The present sequence represents the mouse megsin
protein, which is given in the exemplification of the present invention. The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising:

Score 69; DB 21; Pred. No. 0.009; 0 Length 368; Indels 0, Gaps 0

mesangial cell proliferative nephritis; nephrotropic; se; glomerular disease; animal model; drug screening.

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RESULT 13
AAY15155
PR XXX PT XXX PX
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence is murine megsin protein. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useful for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases.
                  31-MAR-1999;
                                                                                                                                                                                                  Cleavage-site
                                                                                                                                                                                                                                                                                              Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSTAPIN; serine protease inhibitor; serpin family; prostate; human; prostate-specific tumour suppressor; apoptosis-inducer; diagnosis; apoptosis-modulator; prognosis; treatment; prostate cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY15155 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 52-53; 62pp; Japanese.
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N-PSDB; AAF82440.
                                                                18-NOV-1999
                                                                                                        WO9958560-A2
                                                                                                                                                                                                                                                                                                                                                                                                         Inhibitory-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         metastatic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Miyata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   model for mesangial cell proliferative nephritis for development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Η,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                  99WO-US07123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      serine protease inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99JP-0285736
                                                                                                                                                                                                                                                                                                             /label= Serine_protease_inhibitory_domain
/note= "Also known as reactive-site loop (RSL)
contains a hinge region and a variable region.
binds to protease active site during inhibition
                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers 330..347
                                                                                                                                                                                                complex and 344..345
                                                                                                                                                                                                                                                                                            330..338
                                                                                                                                                                                                                                                 /note= "confers
                                                                                                                                                                             'note=
                                                                                                                                                                                                                                                                       /label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83.1%;
87.5%;
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                                                                                                                                                                             "included
                                                                                                                                                                                                                                          RSL_hinge_region
"confers stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            328
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                                                                                                                                                     Leavage
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Pred. No. 0.
                                                                                                                                                                                                                       highly
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                                                                                                                                                     at
                                                                                                                                                                          the
                                                                                                                                                                                                                       conserved a
                                                                                                                                                     this
                                                                                                                                                                          RSL variable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DВ
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                                                                                                                                                     site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                   during
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                          serpin-protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                               le region. R
inhibition*
                                                                                                                                                                          region.
                                                                                                                                                                                                                       the
                                                                                                                                                   inhibition'
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RESULT 14
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N-PSDB;
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                                                                                                                               Key
                                                                                                                                                                             LAPC-9 AD xenograft; androgen dependent Li diagnosis; prognosis; treatment; prostate
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15-MAY-1998;
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DB; AAZ29049.
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13; Conserv
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HUBERT R S.
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SYLDVSEEGTEAAAATG
                                                                                                                                                                                                                                                                                standard;
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98US-0085720.
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232
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                                                                                                                                                                                       serine protease inhibitor; serpin family; ft; androgen dependent LAPC-9 xenograft; cl
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The present sequence is a PROSTAPIN (prostate serine protease inhibitor) mutant encoded by cDNA clone 2 derived from cDNA library of prostate cancer xenograft LAPC-9 AD which was generated from a bone tumour blopsy of a patient with hormone-refractory metastatic prostate cancer. Clone 2 is a partially unspliced version of wild type PROSTAPIN coding sequence with an insertion sequence and several point mutations. PROSTAPIN is expressed in normal prostate and locally confined prostate cancer, while its expression is lost or attenuated in advanced stage cancer. Wild type PROSTAPIN functionality is either altered or completely lost in the mutant. PROSTAPIN is useful in diagnosing, prognosing, monitoring and treating prostate cancer, particularly advanced stage and
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                                                                                           The present sequence is human headpin (for head and neck serpin (seprotease inhibitor)) partial protein. Headpin is a differentially expressed serine protease inhibitor that belongs to the ov-serpin family. It has been grouped into the cluster of serpins located at chromosome 18q21.3/18q22. The headpin cDNA and protein are used to diagnose and treat cancer, such as of the head and neck, brain, lundinger, spleen, kidney, lymph node, small intestine, pencreas, blood cells, colon, stomach, breast, endometrium, prostate, testicle, over skin, oesophagus, bone marrow or blood. They are used to identify substances that modulate the headpin activity. Antibodies of headpin substances that modulate the headpin activity.
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cytostatic; chromosome 18q21.3-22; therapy; cancer.
                                                Sequence
                                                                    assays (ELISA).
                                                                                  are also used to diagnose cancers using e.g. enzyme linked immunosorbent
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Search completed: July 11, 2003, 11:54:20 Job time: 10.7547 secs

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3: /cgn2_6/ptodata/1,
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US-08-613-912-110
US-09-643-597-110
US-09-643-597-112
US-09-643-597-112
US-09-200-965-2
US-09-200-965-2
US-08-477-112-4
PCT-US93-08322-4
US-08-745-995A-24
US-08-745-995A-24
US-08-745-995A-26
US-08-745-995A-26
US-08-745-995A-26
US-08-745-995A-26
US-08-745-995A-26
US-08-745-995A-8
US-08-745-995A-8
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US-08-611-977-4
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	Sequence 6, 1	Sequence 14,	Sequence 2, 1	Sequence 2, i	Sequence 32,	Sequence 2,	Sequence 18,	Sequence 36,	Sequence 6, 1	Sequence 3, 1	Sequence 3, 1	Sequence 8, 1	Sequence 8, 1	Sequence 8, 1	Sequence 8, i	Sequence 4, 1	Sequence 4, 1	Sequence 4, i
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ALIGNMENTS

APPLICATION UNMER: US/08/611,977
FILING DATE: 06-MAR-1996
CLASSIFICATION: 435
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-Z12305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: MGGOWAD, MAICOLM K.

PEGISTRATION WIMBER: 30-30-30 TELEFAX: (703) 836-202 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: APPLICANT: TSUROUOKA, NO.
APPLICANT: MAKAZATO, Hiro
APPLICANT: MIURA, Kenju
APPLICANT: ISHIDA, NO. 59
APPLICANT: KURTHARA, Tats
APPLICANT: YAMAGUCHI, KOZO
APPLICANT: YAMAGUCHI, COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/611,97 REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION: COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk APPLICANT: ISHIDA, No. 5972886uhiro
APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMACUCHI, No. 5972886omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34 CORRESPONDENCE ADDRESS: CITY: Alexandria STATE: Virginia INFORMATION: TRY: United States 22313-1404 , Application US/08611977 5972886 E: Burns, Doa P.O. Box 1404 TSUROUOKA, No. 5972886uo NAKAZATO, Hiroshi TSUJIMOTO, WASA, Fuyul (703) 836-2021 836-6620 Doane, Swecker & Mathis Release #1.0, Masafumi 39,300 001560-204 Version ## |---

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; TOPOLOGY: 1; MOLECULE TYPE: US-08-472-659-34
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Best Local :
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                                                           TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
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TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
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APPLICATION NUMBER: US/08/472,659
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 536
PRIOR APPLICATION DATA:
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                                                                                                                                TELEPHONE:
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                                                                                                                                                                                   REGISTRATION NUMBER:
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YAMAGUCHI, NO. 5831030omi
INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
SEQUENCES: 34
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NAKAZATO, Hiroshi
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Query Match

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Score 83;

DB 2;

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                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08
FILING DATE: 14-JUL-1993
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0.
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FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
ADDITIONATION DATA:
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                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: OCTELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: JP 5-067339 FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                    MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
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                                                                                                                                                                               LENGTH: 380 amino acids
                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                             TELEPHONE:
                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 07-JUI
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325 SYIEVTEEGTEATAATG 341
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                 1 SYIEVTEEGTEATAATG 17
                                                           l Similarity
17; Conserv
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                                                                                                                                                                  amino acid
                                                                                                                                                                                                                                                                                                            REA, TERESA STANEK
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YAMAICHI, KOZO
YAMAGUCHI, NO. 5874253omi
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NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                 (703)
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                                                                                                                                                                                                                                                 836-6620
                                                                         100.0%;
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                                                                           Score 83;
Pred. No.
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; Mismatches 0;
                                                            Mismatches
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                                                                         6.4e-06;
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                                                                                       Length 380;
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APPLICANT:

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RESULT 5
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                                                                                                               US-08-472-659-4
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                                                            Sequence 4, Applica
Patent No. 5831030
GENERAL INFORMATION
                                                                                                                                                                                                                                                                        Query Match
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SEQUENCE CHARACTERISTICS:
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APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. 5972886omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: MCGOWAI, MAICOLM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                               APPLICANT:
                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                        LENGTH: 380 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
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   PPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: Alexandria
STATE: Virginia
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                                                                                                                                                                           INFORMATION:
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                                                                                                                                                                                                                                          17; Conservative
                                                                                              Application US/08472659
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TSUROUOKA, No. 5972886uo
NAKAZATO, Hiroshi
IWASA, Fuyuki
TSUROUOKA, No. 5831030uo
NAKAZATO, Hiroshi
                                             TSUJIMOTO, Masafumi
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
TYPE: amino acid
STRANDENESS: single
                                                                                                                                                               Patent No. 5874253
GENERAL INFORMATION:
                                                                                                                                                                        Sequence 4, App. ... 8874253
                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
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APPLICANT:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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APPLICANT:
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
 NUMBER
                          APPLICANT:
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               ITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 39,300
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14; Conserv
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                                                                                                                                                                                           Application US/08474661
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                        MIURA, Kenju
ISHLDA, NO. 5874253uhiro
KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAICHI, KOZO
YAMAGUCHI, NO. 5874253omi
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                                                                                             IWASA, Fuyuki
TSURUOKA, No. 5874253uo
NAKAZATO, Hiroshi
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VENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                 TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                          linear
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                                                                                                                                                                                                                                                                                                                                             83.1%;
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MEGAKARYOCYTE DIFFERENTIATION FACTOR
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Pred. No. 3.2e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                            2;
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                                                                                                                                                                                                                                                                                                                                                             Length 17;
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                                                                     ; ORGANISM: Homo sapiens US-09-123-912-110
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US-09-123-912-110
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                                                                                                                        SOFTWARE: Pa
SEQ ID NO 110
LENGTH: 391
                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Reed, Steven G.
APPLICANT: Wang, Tongtong
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY OF LUNG CANCER
FILE REFERENCE: 210121.455C1
                                        Query Match
                                                                                                                                                                                                                                                                                                                                               Patent No. 6312695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                     FILE REFERENCE: 210121.455C1
CURRENT APPLICATION NUMBER: US/09/123,912A
CURRENT FILING DATE: 198-07-27
PRIOR APPLICATION NUMBER: 09/040,802
PRIOR FILING DATE: 1998-03-18
                                                                                                                                                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (703) 836-6620
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
TYPE: amino acid
                                                                                                            TYPE: PRT
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APPLICATION NUMBER: US 08/091,028

FILING DATE: 14-JUL-1993

FILING DATE: 14-JUL-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
REGISTRATION NUMBER: 30,4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-UUL-1992
PRIOR APPLICATION NUMBER: JP 5-067339
APPLICATION NUMBER: JP 5-067339
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MEDIUM TYPE: Floppy disk
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Local Sim.
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TOPOLOGY: lir
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FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                      Similarity
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                                                                                                                                                             PatentIn Ver. 2.0
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87.5%;
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Pred. No. 3.2e-05;
   Score 67; DB 4; Length 391; Pred. No: 0.0027; Indels 2; Mismatches 2; Indels
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US-09-123-912-112
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                                                                                                                                       SOFTWARE: Pa
SEQ ID NO 112
LENGTH: 400
TYPE: PRT
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Best Local s
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                                                                                                                                                                                                                                                                                                                                       Patent No. 6312695
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CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
                                                                                                                                                                                                                                                                 APPLICANT: Reed, Steven G.
APPLICANT: Wang, Tongstong
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY OF LUNG CANCER
FILE REFERENCE: 210121.455C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: COMPOSITIONS AND TITLE OF INVENTION: AND DIAGNOSIS OF FILE REFERENCE: 210121.455C11
                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                            PRIOR FILING DATE:
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343 SFVAVTEEGTEAAAATG 359
              1 SYIEVTEEGTEATAATG 17
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13; Conserv
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13; Conserv
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Fan, Liqun
                                                                                                                                                                                PatentIn Ver. 2.0
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Henderson, Robert A.
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                                                      Conservative
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76.5%;
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                                                                   Score 67; DB 4; Pred. No. 0.0028;
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Pred. No.
                                                      Mismatches
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0.0027;
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US-09-200-965-2
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SCOTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 112
LENGTH: 400
TYPE: PAT
ORGANIZM: Homo sapien
US-09-643-597-112
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Patent No. 6133422
GENERAL INFORMATION:
APPLICANT: ROSEN, ET AL.
TITLE OF INVENTION: Thrombin In
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Best Local (
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Patent No. 6426072
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APPLICANT:
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CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
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                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/171,817
FILING DATE: 22-DECEMBER-1993
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
NAME: 76.134
                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 INC.
                                                                                                                                                                                                  SOFTWARE: WORD PERFECT 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
TELEPHONE: 201-994-1700
                                                                                                                                                                                                                            COMPUTER: IBM PS/
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                 STREET: 6 BECKE
CITY: ROSELAND
                            REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-47
                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN STREET: 6 BECKER FARM ROAD
                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                    COUNTRY: UZIP: 07068
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Fan, Liqun
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76.5%;
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Pred. No. 0.0028;
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RESULT 12
US-08-121-714-4
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.1)
SOFTWARE: WOrdPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                      FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 536 PRIOR APPLICATION DATA:
                                                                                                                                  SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                             FILING DATE: 09/01/9
APPLICATION NUMBER:
FILING DATE: 02/28/9
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                       NAME: Fraser, Janis K. REGISTRATION NUMBER: 34,819
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                                                                                         STRANDEDNESS:
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12; Conserv
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225 Franklin Street
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y 75.0%;
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Score 62; DB 1;
Pred. No. 0.017;
2; Mismatches
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0.017;
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                             Length 379;
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US-08-477-108A-4
                                                                                                         RESULT 14
US-08-477-112-4
                                                                                                                                                                                                                                                                                               US-08-477-108A-4
GENERAL INFORMATION:
APPLICANT: Sager, RU
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                 Best
                                                                           Sequence 4, Application US/08477112 Patent No. 5905023
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/477,108A FILING DATE: June 7, 1995 CLASSIFICATION: 536 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/121,714 FILING DATE: 09/01/93 APPLICATION NUMBER: 07/938,823 FILING DATE: 09/01/92 APPLICATION NUMBER: 07/844,296 APPLICATION NUMBER: 07/844,296
                                                                                                                                                                                                                                                                                                                                                                    TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: 3.5" Di
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 02/28 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                              TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
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                                                                                                                                                                      322 SEVEVNEEGTEAAAAT 337
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                                                                                                                                                                                       1 SYIEVTEEGTEATAAT 16
                                                                                                                                                                                                                                                 Similarity
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U.S.A.
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225 Franklin Street
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IBM PS/2 Model 50Z or 55SX
SYSTEM: MS-DOS (Version 5.0)
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02/28/92
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                                               Ruth
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75.0%;
 MASPIN, A NOVEL SERPIN WITH TUMOR SUPPRESSING ACTIVITY 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34,819
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Pred. No. 0.017;
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                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                               DB 1;
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GENERAL INFORMATION:
APPLICANT: Sager,
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Best Local S
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NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 0657
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 379
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

MEDIUM TYPE: 3.5" Andel 50Z or 55SX

COMPUTER: IBM PS/2 Model 50Z or 55SX

COMPUTER: MS-DOS (Version 5.1)
                               COMPUTER: IBM PS/2 Model 50Z or 55S: OPERATING SYSTEM: MS-DOS (Version 5 SOTTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
COMPUTER: IBM PS/2 Model 50
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APPLICATION NUMBER:
FILING DATE: 09/01/9
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ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                 TITLE OF INVENTION: MASPIN, A NOVEL SERPIN WITH TUMOR SUPPRESSING ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
FILING DATE:
               APPLICATION NUMBER:
                                                                                                                                                    COUNTRY:
                                                                                                                                                                    STATE: Massachusetts
                                                                                                                                                                                     CITY: Boston
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12; Conserv
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225 Franklin Street
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75.08;
                                                                 2 Model 50z or 55SX
MS-DOS (Version 5.0)
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PRIOR APPLICATION NUMBER: 07/938,823
FILING DATE: 09/01/92
APPLICATION NUMBER: 07/844,296
FILING DATE: 02/28/92
FILING DATE: 02/28/92
APPLICATION NUMBER: 07/662,216
FILING DATE: 02/28/92
APPLICATION NUMBER: 07/662,216
FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 00530/072001
TELECOMMUNICATION INFORMATION:
TELEFAX: (617) 542-8906
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
FYEE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
PCT-US93-08322-4

Query Match
Best Local Similarity 75.0%; Fred. NO. 0.017;
Matches 12: Conservative 2; Mismatches 2; Indels 0; Gaps 0;
Best Local Similarity 75.0%; Fred. NO. 0.017;
Matches 12: Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Oy 1 SYLEVTEEGTEATAAT 16
Db 322 SFVEVNEEGTEATAAT 16
Db 322 SFVEVNEEGTEATAAT 337
Search completed: July 11, 2003, 12:02:07
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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
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DB seq length: 2000000000
           of hits satisfying chosen parameters:
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1 SYIEVTEEGTEATA
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         Published_Applications_AA: *
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         US-10-091-442-4

US-10-991-442-34

US-10-991-442-34

US-10-991-442-34

US-10-91-744-898-169

US-10-9895-814-946

US-10-198-070-67

US-10-198-070-67

US-10-198-070-67

US-10-198-070-70

US-10-198-070-71

US-10-198-070-71

US-10-198-070-71

US-10-198-070-71
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Sequence 4, Appli
Sequence 34, Appli
Sequence 34, Appl
Sequence 134, Appl
Sequence 169, App
Sequence 946, App
Sequence 67, Appl
Sequence 67, Appl
Sequence 947, Appl
Sequence 947, Appl
Sequence 947, Appl
Sequence 110, App
                                                                                                                                                                                                                                                                                                                                                                                        Description
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US-10-091-442-4
Sequence 4, Application US/10091442
Patent No. US20020164711A1
GENERAL INFORMATION:
APPLICANT: TSUJIMOTO, Masafumi
IMASA, Fuyuki
US2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <UDMnown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
                                                                                                                                                                                                                                                                                                                                                                                                                                            KURIHARA, Tatsuya
YAMAICHI, ROZO
YAMAGCHI, ROZO
YAMAGCHI, NO. US20020164711A1omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSE: Burns, Doane, Swecker & Mathis
STREET: P.O. Box 1404
                                                                                                                                                                                                                                                     ZIP: 22313-1404
COMPUTER REALABBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: United States
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ISHIDA, No. US20020164711Aluhiro
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NAKAZATO, Hiroshi
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sequence 21, Appl
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sequence 27, Appl
sequence 28, Appl
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sequence 30, Appl
sequence 452, App
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                             FILING DATE: 17-JUL-
PRIOR APPLICATION DATA:
                                                                                             FILING DATE: 14-JUL-
PRIOR APPLICATION DATA:
ATTORNEY/AGENT INFORMATION
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                                                             APPLICATION NUMBER: JP 4 FILING DATE: 17-JUL-1992
                                                                                                                                                                                                               APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998 CLASSIFICATION:
                                                                                                                               APPLICATION NUMBER:
                              APPLICATION NUMBER:
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ATTORNEY/AGENT INFORMATION:
NAME: MCGowan, Malcolm K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
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NAKAZATO, Hiroshi
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YAMAGUCHI, No. US20010026931A1omi
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                                                                                                                                                                                                                                                                                                                                                                                                                            Burns, Doane, Swecker & Mathis O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SHIDA, No.
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                                                                                                              UMBER: US 08/091,028
14-JUL-1993
                 04-MAR-1993
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                                JP 6-067339
                                                                                JP.4-212305
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 00 TELECOMMUNICATION INFORMATION
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                  TELECOMMUNICATION INFORMATION
                                                                                       FILING DATE: 04-MAR-19 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                        CLASSIFICATION: <Unknown> PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS: ADDRESS: Burns,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KURTHARA, Tatsuya
YAMAICHI, KOZO
YAMAICHI, KOZO
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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17; Conserv
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                                                  NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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TELEPHONE:
                                   REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                           APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-UUL-193
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                              APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: P.O. Box 1404
                                                                                                         APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
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ISHIDA, No. US20020164711A1uhiro
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NAKAZATO, Hiroshi
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Pred. No.
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US-09-140-719-34
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                                  TELEFAX: (703) 836-2021 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 34: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE.
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
05/09/140,719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
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nes 17; Conserv
                                                                                                                      REGISTRATION NUMBER:
                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 04-MA
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 08-AUG
                                                                   TELEPHONE:
                                                                                                       REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22313-1404
                                                                                                                                      McGowan, Malcolm K.
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: United States
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YAMAICHI, KOZO
YAMAGUCHI, NO. US20010026931Alomi
YAMAGUCHI, NO. US20010026931Alomi
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TSUROUOKA, No. US?
NAKAZATO, Hiroshi
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                                                                                                                                                                                             JP 6-067339
                                                                                                               39,300
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US-09-764-898-169

; Sequence 169, Application US/09764898

; Patent No. US20020090673A1
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                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PJZ01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Pa
                                                       SOFTWARE: PatentIn Ver. SEQ ID NO 169
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Best Local
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Patent No. US20010039335A1
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ORGANISM: Homo sapiens -09-764-898-169
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CURRENT FILING DATE: 2000-12-04
PRIOR APPLICATION NUMBER: 09/539,330
PRIOR FILING DATE: 2000-03-30
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                                                                                                                  CURRENT FILING DATE: 2001-01-17
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                                                                                     Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 283
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TYPE: PRT
ORGANISM: Homo sapiens
                           TYPE: PRT
                                         LENGTH:
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es 13; Conserv
                                                                                                                                                                                                                                                                                              1 SYIEVTEEGTEATAATG 17
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160 SYLDVSEEGTEAAAATG 176
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76.58;
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Pred. No. 0.
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Pred. No.
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RESULT 8
US-09-895-814-946
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                                                                              Sequence 946, Application Publication No. US20020193 GENERAL INFORMATION: APPLICANT: Xu, Jiangchun
                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/012,896
CURRENT FILING DATE: 2001-12-10
NUMBER OF SEQ ID NOS: 1011
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 946
LENGTH: 379
TYPE: PRT
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Best Local Similarity
Matches 13; Conserv
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TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C27
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APPLICANT: Dillon, Davi
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           Harlocker, Susan L.
Jiang, Yuqiu
Kalos, Michael D.
                                                    Dillon, Davin C.
Mitcham, Jennifer L.
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Wantanabe, Yosh
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Houghton, Raymond L.
Vinals de Bassols, Carlota
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Kalos, Michael D.
                                                                                                            Application US/09895814 o. US20020193296A1
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Hepler, William T.
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Mitcham, Jennifer L.
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b. US20020183251A1
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ick, Thomas S.
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76.5%;
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Pred. No.
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Pred. No. 0.0023;
3; Mismatches 1
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PRIOR APPLICATION NUMBER: 50/306,161
PRIOR FILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 125
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 62
LENGTH: 392
TYPE: PRT
ORGANISM: Homo sapiens
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SOFTWARE: FRATSEQ for Windows Version 3.0
SEQ ID NO 946
LENGTH: 379
TYPE: PRT
ORGANISM: Homo sapiens
                                                            Query Match
Best Local Similarity
Matches 13; Conserv
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Best Local :
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                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/198,070 CURRENT FILING DATE: 2002-07-19
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TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C26
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335 SYLDVSEEGTEAAAATG
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                1 SYIEVTEEGTEATAATG
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13; Conserv
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Vinals de Bassols, Carlota
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McNeill, Patricia D.
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Hepler, William T.
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Carter, Darrick
                                                            Conservative
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ick, Thomas
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76.5%;
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Pred. No.
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Pred. No. 0.0026;
                                                              Mismatches
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                                                                             DB 9;
0.0027;
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                                                                                           Length 392
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; ORGANISM: Homo sapiens
US-10-198-070-70
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; ORGANISM: Homo sapiens
US-10-198-070-67
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CURRENT FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 70, Application US/10198070 Publication No. US20030109437A1 GENERAL INFORMATION:
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                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 70
LENGTH: 392
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Best Local S
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APPLICANT: GEMMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TREATMENT OF TUMORS AND OTHER
TITLE OF INVENTION: CONDITIONS REQUIRING THE REMOVAL OR DESTRUCTION OF
TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
FILE REFERENCE: 59003.000008
                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/306,161
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR FILING DATE: 2001-11-16
NUMBER OF TAKES 2001-11-16
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TITLE OF INVENTION: PEPTIDES EFFECTIVE IN
TITLE OF INVENTION: CONDITIONS REQUIRING
TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
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CURRENT FILING DATE: 2002-07-19
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335
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1 Similarity 76.5%;
13; Conservative
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                       1 SYIEVTEEGTEATAATG 17
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SYLDVSEEGTEAAAATG 351
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Pred. No. 0.0027;
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Pred. No. 0.
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                                                                     DB 9; LC. 0.0027; 1;
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 947
LENGTH: 617
TYPE: PRT
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TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C27
CURRENT APPLICATION NUMBER: US/10/012,896
CURRENT FILLING DATE: 2001-12-10
NUMBER OF SEQ ID NOS: 1011
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OTHER INFORMATION: Xaa - Any Amino Acid
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                                                                                                                                                                                                                                                                                                      560 SYLDVSEEGTEAAAATG 576
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Day, Craig H. Vedvick, Thomas Carter, Darrick Li, Samuel X.
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Wantanabe, Yoshihiro
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Vinals de Bassols, Carlota
                                                                                       Jiang, Yuqiu
Kalos, Michael D.
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Hepler, William T.
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                                                            Retter, Marc W. Stolk, John A.
                                                                                                                           Harlocker, Susan L.
                                                                                                                                        Mitcham, Jennifer L.
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b. US20020193296A1
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                                Craig H.
ick, Thomas S.
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Pred. No.
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Skeiky, Yasir A.W. Hepler, William T.

Henderson, Robert A.

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, NAME/KEY: variant
; LOCATION: (1)...(617)
; OTHER INFORMATION: Xaa - Any amino acid
US-09-895-814-947
                                                                                          RESULT 15
US-09-466-396A-110
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                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
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SEQ ID NO 355
LENCTH: 391
TYPE: PRT
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SEQ ID NO 947
LENCTH: 617
TYPE: PRT
ORGANISM: Homo sapiens
                                      GENERAL INFORMATION:
                                                      Sequence 110, Application US/09466396A Publication No. US20030119763A1
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Best Local
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APPLICANT: Wang, TO TITLE OF INVENTION:
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TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C26
CURRENT APPLICATION NUMBER: US/09/895,814
CURRENT FILING DATE: 2001-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Baranova, A. V.
APPLICANT: Yankovsky, N. K.
APPLICANT: Kozlov, A. P.
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CURRENT FILING DATE: 2002-05-30
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APPLICANT: Krukovskaya, L. L.

TITLE OF INVENTION: In silico screening for phenotype-associated expressed sequences FILE REFERENCE: 2760-103
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13; Conserv
                                                                                                                                                                                1 SYIEVTEEGTEATAATG 17
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Vinals de Bassols, Carlota
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                                                                                                                                                                                                                                    Conservative
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                       Tongtong
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     COMPOUNDS AND METHODS FOR THERAPY AND
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76.5%;
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76.5%;
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                                                                                                                                                                                                                                                 Score 67; DB 9; Pred. No. 0.0057;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 69; DB 9; Length 617; Pred. No. 0.0045;
                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                   Length 391;
                                                                                                                                                                                                                                    Indels
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Search completed: July 11, 2003, 12:37:33
Job time: 5.98337 secs
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                                                                                               Query Match
Best Local Similarity
Thes 13; Conserve
                                                                                                                                                                  ; TYPE: PRT; ORGANISM: Homo sapien US-09-466-396A-110
                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 110
                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/466,396A CURRENT FILING DATE: 1999-12-17
                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: DIAGNOSIO
                                                                                                                                                                                                             ENGTH: 391
                                                       334 SFVAVTEEGTEAAAATG 350
                                                                       1 SYIEVTEEGTEATAATG 17
                                                                                                                                                                                                                                      FastSEQ for Windows Version 3.0
                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                             DIAGNOSIS OF LUNG CANCER
                                                                                                                           80.7%;
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                                                                                                                           Score 67; DB 9; Pred. No. 0.0057;
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proteinase inhibit	148717	N	397	61.4	51	G
alpha-1-antichymot	JH0493	N	369	61.4	51	4
hypothetical prote	T16119	N	366	61.4	51	ښ
antithrombin-III h	WMVZ2C	<u>, </u>	353	61.4	51	2
antithrombin-III h	WMVZS1	1	353	61.4	51	Ľ
serpin - Ectromeli	S24676	بر	344	61.4	51	0
serine proteinase	B26423	N	216	61.4	51	Ģ
serpin Spi2 (clone	S15629	N	66	61.4	51	8
serpin Spi2 (clone	S15633	N	64	61.4	51	7
serpin Spi2 (clone	S15635	Ŋ	64	61.4	51	6
protein T2E6.22 (i	Н96517	N	391	62.7	52	ű
antithrombin-III h	WMVZW2	۳	345	62.7	52	4
	T28611	N	344	62.7	52	ũ
D2R protein - vari	E72173	N	344	62.7	52	ົວ
Bl3R protein - var	S46871	N	344	62.7	52	F
antithrombin-III h	IHZVMW	_	341	62.7	52	ö

C; Species: Homo saplens (man) C; Species: Homo saplens (man) C; Date: 07-Apr-1994 #sequence_revision 07-Jul-1995 #text_change Darley C; Accession: A48681; A54352; A46672; B46672; C46672; S35750 R; Coughlin, P.; Sun, J.; Cerrutt, L.; Salem, H.H.; Bird, P. Proc. Natl. Acad. Sci. U.S.A. 90, 9417-9421, 1993 In precur A; Title: Cloning and molecular characterization of a human intra A; Reference number: A48681; MUID:94022386; PMID:8415716 A; Reference number: A48681; MUID:94022386; PMID:8415716 A; Residues: 1-376 < COU	bin bin to red t	RESULT 1 JC7118 headpin serine proteinase inhibitor - human C; Species: Homo sapiens (man) C; Date: 19-May-2000 #sequence_revision 19-May-2000 #text C; Accession: JC7118 R; Spring, P; Nakashima, T; Frederick, M; Henderson, Y Biochem. Biophys. Res. Commun. 264, 299-304, 1999 A; Title: Identification and cDNA cloning of headpin, a n A; Reference number: JC7118; MUID:99458661; PMID:10527881 A; Accession: JC7118 A; Molecule type: mRNA A; Residues: 1-391 < SPR> A; Cross-references: GB:AF169949; NID:95911368; PIDN:AAD5 C; Genetics: A; Map. position: 18921 3-18922 C; Nap. position: 18921 3-18922 C; Reywords: serine proteinase inhibitor C; Keywords: serine proteinase inhibitor
C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;Date: 07-Apr-1994 #sequence_revision 07-Jul-1995 #text_change 10-Jun-1999 C;Accession: A40681; A54352; A46672; B46672; C46672; S35750 R;Coughlin, P.; Sun, J.; Cerrutt, L.; Salem, H.H.; Bird, P. Proc. Natl. Acad. Sci. U.S.A. 90, 9417-9421, 1993 A;Title: Cloning and molecular characterization of a human intracellular serine prote A;Reference number: A48681; MUID:94022386; PMID:8415716 A;Accession: A48681 A;Accession: A4868	Ouery Match Bo.7%; Score 67; DB 2; Length 391; Best Local Similarity 76.5%; Pred. No. 0.0023; Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0; Qy 1 SYIEVTEEGTEATAATG 17 :: Db 334 SFVAVTEEGTEAAAATG 350 RESULT 2 A48681 placental thrombin inhibitor - human N;Alternate names: Cytoplasmic antiproteinase; Intracellular serine proteinase inhibi	RESULT 1 JC7118 headpin serine proteinase inhibitor - human C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;Date: 19-May-2000 #sequence_revision 19-May-2000 #text_change 26-May-2000 C;Accession: JC7118 R;Spring, P.; Nakashima, T.; Frederick, M.; Henderson, Y.; Clayman, G. Biochem. Biophys. Res. Commun. 264, 299-304, 1999 A;Title: Identification and cDNA cloning of headpin, a novel differentially expressed A;Reference number: JC7118; MUID:99458661; PMID:10527881 A;Reference number: JC7118; MUID:99458661; PMID:10527881 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-391 <spr> A;Cross-references: GB:AF169949; NID:95911368; PIDN:AAD55765.1; PID:95911369 C;Genetics: C;Repvords: serine proteinase inhibitor C;Repvords: serine proteinase inhibitor F;355/Inhibitory site: Val (unidentified proteinase) #status predicted</spr>

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A;Status: preliminary
A;Molecule type: mRMA
A;Residues: 1-379 <REM>
A;Cross-references: EMBL;
R;Packard, B.Z.; Lee, S.
                                                                                                       R:Remold-O'Donnell, E.; Chin, J.; Alberts, M.
Proc. Natl. Acad. Sci. U.S.A. 89, 5635-5639, 1992
A;Title: Sequence and molecular characterization of human A;Reference number: S27383; MUID:92302296; PMID:1376927
A;Accession: S27383
                                                                                                                                                                                                    elastase inhibitor - human
C;Species: Homo sapiens (man)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 05-Sep-1997
C;Accession: S27383; S65750
C;Accession: S27383; S65750
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S38962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Superfamily: antithrombin III C; Keywords: blocked amino end; (F; 341/Inhibitory site: Arg (thro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Biol. Chem. 268, 9541-9547, 1993
A:Title: Identification and purification of a novel serine proteinase inhibitor.
A:Reference number: A46672; MUID:93252826; PMID:8488644
A:Accession: A46672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-174 'E', 176-361, 'S', 363-376 <MOR>
A; Cross-references: GB:S69272; NID:g546087; PIDN:AAB30320.1;
A; Experimental source: placenta
A; Note: sequence extracted from NCBI backbone (NCBIN:145231,
R; Coughlin, P.B.; Tetaz, T.; Salem, H.H.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: Sus scrofa domestica (domestic pig)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997
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A; Residues: 47-60;63-81;91-98 <CO2>
A; Experimental source: placenta, leukemic of a; Note: sequence modified after extraction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: protein A; Residues: 1-378 <TES>
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R; Teschauer, W.F.; 1
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A; Map position: 6p25-6p24.3
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Best Local :
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12; Conserv
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  EMBL:M93056
e, S.S.; Remold-O'Donnell,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74.78;
75.08;
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rombin) #status predicted
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Pred. No.
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. 0.015;
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    Komoriya,
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protein Z4 - barley
N;Alternate names: major endosperm albumin
C;Species: Hordeum vulgare (barley)
C;Date: 30-Jun-1987 #sequence_revision O1-Dec-2000 #text_change O1-Dec-2000
C;Accession: S13822; A01252
R;Brandt, A.; Svendsen, I.; Hejgaard, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Superfamily: antithrombin III
C;Keywords: glycoprotein; bhosphoprotein; serine proteinase inhibitor
C;Keywords: glycoprotein; bhosphoprotein; serine proteinase inhibitor
F;74-121/Disulfide bonds: #Status predicted
F;293/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;345/Binding site: phosphate (Ser) (covalent) #status predicted
                      R;Hejgaard, J.;
FEBS Lett. 180,
                      A;Cross-references: GB:X51726; NR;Hejgaard, J.; Rasmussen, S.K.; FEBS Lett. 180, 89-94, 1985
                                                                                                                                                                     Eur. J. Biochem. 194, 499-505, 1990
A; Title: A plant serpin gene. Structure, organization and A; Reference number: S13822; MUID:91099324; PMID:2269280
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ovalbumin-related r protein - chicken
C;Species: Gallus gallus (chicken)
C;Date: 17-Dec-1982 #sequence_revision 17-Dec-1982 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Supertam11
C; Keywords:
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A;CroSs-references: GDB:132914;
A;Map position: 6p25-6p24 3
C;Superfamily: antithrombin III
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A;Title: A serpin from human tumor cells with direct lymphoid immunomodulatory activi
A;Reference number: S65750; MUID:96049524; PMID:7578269
A;Accession: S65750
A;Status: preliminary
                                                                                     A; Molecule type: DNA
A; Residues: 1-399 <BRA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type:
A; Residues: 1-38
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                                                                                                                             A; Status: preliminary
                                                                                                                                                   A; Accession: S13822
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Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1-388 <HEI>
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12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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75.08;
                                          NID:g19067; P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OMIM: 130135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 60;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 62; DB 2; Pred. No. 0.015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                          PIDN:CAA36015.1; .; Svendsen, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.034;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DВ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIDN: AAA68882.1;
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                                                                                                                                                                                                expression
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                                                              PID:g19068
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  inhibitors
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homology between barley endosperm protein

2

and protease

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squamous cell carcinoma antigen 1 - human

C;Species: Homo saplens (man)

C;Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text_change 26-May-2000

C;Accession: 138201; 138200; G01631; JT0966; JT0967

C;Accession: 138201; 138200; G1631; JT0966; JT0967

R;Schneider, S.S.; Schick, C.; Fish, K.E.; Miller, E.; Pena, J.C.; Treter, Proc. Natl. Acad. Sci. U.S.A. 92, 3147-3151, 1995

A;Title: A serine proteinase inhibitor locus at 18q21.3 contains a tandem d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A: Map position: 4
C; Superfamily: antithrombin III
C; Keywords: setine proteinase in
F; 357/Inhibitory site: Met (unid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A: Map position: 13
C: Superfamily: antithrombin III
C: Keywords: serine proteinase in
F: 343/Inhibitory site: Arg (unio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           proteinase inhibitor Spi3 - mouse
C;Specites: Mus musculus (house mouse)
C;Date: 08-Dec1995 #sequence_revision 08-Dec-1995 #text_change 16-Jul-1999
C;Accession: A57488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
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A;Title: Localization on barley chromosome 4 of genes coding A;Reference number: A90095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; MoLecule type: mRNA
A; Action (1978) A: PID: 320-339 A: PID
                                A; Reference number: I38200; MUID: 95241462; A; Accession: I38201
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A; Residues: 1-378 <SUN>
A; Cross-references: GB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Sun, J.; Rose, J.B.; Bird, P.
J. Biol. Chem. 270, 16089-16096, 1995
A;Title: Gene structure, chromosomal localization, and expression A;Reference number: A57488; MUID:95332310; PMID:7608171
A;Accession: A57488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Contents: annotation; map position
C; Comment: A major component of the endosperm albumin, this protein acts as a storage prince of the antithrombin-III superfamily suggests that it also has an inhibitory function
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Reference number: A91332
A; Accession: A01252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Gene: Spi3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
A; Status: nucleic acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
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1 Similarity 75.0%;
12; Conservation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       serine proteinase inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 SYIEVTEEGTEATAAT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AFVEVNEEGTEAAAAT 336
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ite: Met (unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GB:U25844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Arg (unidentified proteinase) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71.1%;
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not shown
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Pred. No. 0.035;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 378
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                                                                                                              a tandem duplication
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A;Molecule type: mRNA
A;Residues: 1-350,'G',352-356,'A',358-390 <SUM1>
A:Cross-references: GB:S66896; NID:g239551; PIDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: EMBL:U19556; NID:g1276435; PID:g1052869 R;Suminami, Y.; Kishi, F.; Sekiguchi, K.; Kato, H. Biochem. Biophys. Res. Commun 181, 51-58, 1991 A;Title: Squamous cell carcinoma antigen is a new member of A;Reference number: JT0966; MUID:92068241; PMID:1958219 A;Accession: JT0966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 submitted to the EMBL Data A; Reference number: G07968 A; Accession: G01631
                                                                                                                                                                                                          C;Superfamily: antithrombin III C;Keywords: cysteine proteinase inhibitor; glycoprotein F;65,93,171,376/Binding site: carbohydrate (Asn) (coval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A: Residues: 1-117 <SCH2>
Вb
                                         δõ
                                                                                                                                                                                    F;354/Inhibitory site: Ser (cathepsin L) #status predicted
                                                                                                                                                                                                                                                                               A; Map position: 18q21.3-18q21.3
A; Introns: 55/3; 74/3; 117/3; 157/1; 204/3;
                                                                                                                                                                                                                                                                                                                            A; Gene: GDB:SCCA1; SCC
A; Cross-references: GDB:625364; OMIM:600517
                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: protein
A;Residues: 11-21;231-237;240-256;303-325 <SUM2>
C;Comment: This antigen probably acts as a proteinase inhibitor to modulate the host
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
A; Residues: 1-350, 'G', 352-390 <SIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Status: preliminary; translated from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Silverman, G.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:U19562; NID:g897835; PIDN:AAA86316.1; PID:g897844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Accession: I38200
A;Status: nucleic acid sequence not shown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: JT0967
                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                  Genetics:
                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cross-references:
  332 AFVEVTEEGAEAAAAT
                                            1 SYIEVTEEGTEATAAT 16
                                                                                                                 Similarity
                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL:U19568; GB:U19558;
                                                                                                            71.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Library, January
                                                                                           Score 59; DB
Pred. No. 0.05
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIDN: AAB20405.1;
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                                                                                                                 DB 2;
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                                                                                                                                                                                                               (covalent)
                                                                                           2,
                                                                                                                                       Length 390;
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                                                                                                                                                                                                               #status
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                                                                                                                                                                                                               predicted
                                                                                             Gaps
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C.Species: Homo sapiens (man)
C.Species: Homo sapiens (man)
C.Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text_change 26-May-2000
C.Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #sequence_revision 23-Feb-1996
C.Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 A; Molecule type: mRNA A; Residues: 7-351, 'V', 353-384 A; Title: Identification of a novel human serpin gene; cloning A; Reference number: \$66675; MUID:96013887; PMID:7589435 A; Accession: \$66675 R;Barnes, R.C.; Worrall, D.I FEBS Lett. 373, 61-65, 1995 A; Status: nucleic acid : A; Molecule type: DNA A; Residues: 1-390 <SCH> A; Reference number: I38200; MUID:95241462; A; Accession: I38202 A; Gene: GDB: SCCA2; C; Genetics: A;Residues: 7-351,'V',353-384 <BAR>A;Cross-references: EMBL:X89015; NI A; Cross-references: EMBL: U19576; GB: U19569; NID: 9852466 N;Alternate names: proteinase inhibitor 11 (PII1); squamous cell carcinoma antigen I38202 RESULT 9 leupin precursor acid sequence not shown PI11 D.M. NID: 9887464; PIDN:CAA61420.1; sequencing PID:9887465 and expressi

GDB:636556; OMIM:600518

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N;Alternate names: cytoplasmic antiproteinase 3 (CAP-3)
C;Species: Homo sapiens (man)
C;Date: 02-Jun-2000 #sequence_revision 02-Jun-2000 #text_change 02-Ju
C;Accession: B59273
R;Sprecher, C.A.; Morgenstern, K.A.; Mathewes, S.; Dahlen, J.R.; Schr
J. Biol. Chem. 270, 29854-29861, 1995
A;Title: Molecular cloning, expression, and partial characterization
A;Reference number: A59273; MUID:96102039; PMID:8530382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Status, F-1
A; Molecule type: mRNA
A; Residues: 1-374 <SPR>
A; Cross-references: GB:L40377; NID:gl160926;
A; Cross-reference: tissue type placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         K:Sprecher, C.A.; Morgenstern, K.A.; Mathewes, S.; Dahlen, J.R.; Schrader, S.K.; Foster J. Biol. Chem. 270, 29854-29861, 1995
A;Title: Molecular cloning, expression, and partial characterization of two novel member A;Reference number: A59273; MUID:96102039; PMID:8530382
A;Accession: A59273
A; Cross-references: GDB:5
A; Map position: 6p25-6p25
                                                                                    A;Cross-references: GB:L40378; A;Experimental source: tissue t
                                                                                                                                  A;Status: preliminary; not compared with conceptual translation A;Molecule type: mRNA A;Residues: 1-376 <SPR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: GDB:599392; OMIM:601697
A;Map position: 18q21.3-18q21.3
C;Superfamily: antithrombin III
C;Keywords: proteinase inhibitor
F;339/Inhibitory site: Arg (unidentified pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N;Alternate names: cytoplasmic antiproteinase 2 (CAP-2) C;Species: Homo sapiens (man) C;Date: 02-Jun-2000 #sequence_revision 02-Jun-2000 #tex C;Accession: A59273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A:Map position: 18q21.3-18q21.3
A:Introns: 55/3; 74/3; 117/3; 157/1; 204/3; 256/3
A:Introns: 55/3; 74/3; 117/3; 157/1; 204/3; 256/3
C:Superfamily: antithrombin III
C:Keywords: glycoprotein; serine proteinase inhibitor
E:1-22/Domain: signal sequence #status predicted <SIG>
E:23-384/Product: leupin #status predicted <MAT>
E:65,93,170,376/Binding site: carbohydrate (Asn) (covalent) #status
                                                A; Gene: GDB: PI9; CAP3
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                                                                                                                                                                                                                                                                                                                                                                                                       proteinase inhibitor 9 – human
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Similarity 68.88;
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                                                                                       type placenta;
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                           OMIM: 601799
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2; Mismatches
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                                                                                                             PIDN:AAC41940.1; PID:g1160929
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                                                                                         note
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S29819
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serpin

barley

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C; Geneti
A; Gene:
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C;Keywords: proteinase inhibitor
C;Keywords: proteinase inhibitor
C;340/Inhibitory site: Glu (unidentified proteinase) #status predicted
F;340/Inhibitory site: Glu (unidentified proteinase) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Accession: T06183
R;Rasmussen, S.K.; Klausen, J.; Hejgaard, J.; Svenson, B.;
Ricking Blochim. Blophys. Acta 1297, 127-130, 1996
Blochim. Blophys. Acta 1297, he plant serpin BSZ7 having
В
                            20
                                                                                                                                                                                                                                                                                                                                          A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change C;Accession: AH1903
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AH1903
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T06183
                                                                                                                                                               A;Cross-references: GB:BA000019; PIDN:BAB72735.1; A;Experimental source: strain PCC 7120
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A; Residues: 1-374 < KUR>
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                                                                                                                                                                                                                                                                                                         R; Kaneko, T.; Nakamura,
Nakazaki, N.; Shimpo, S
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A: Cross-references: EMBL: X95277;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Hordeum vulgare (barley)
C;Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 21-Jul-2000
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                                                                                                                                                                                                                                                                            A; Title: Complete Genomic
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                                                                               Query Match
Best Local :
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                 3 IEVTEEGTEATAAT 16
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                                                                               68.7%;
                                                                                                                                                                                                                                                             Sequence of the Filamentous Nitrogen-fixing Cyanobacterium r; MUID:21595285; PMID:11759840
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328
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Pred. No.
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Takazawa, M.;
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0.075;
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                                                                                                                                                                               PID:g17130123; GSPDB:GN00179
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                                                                                             Length 374;
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30-Jun-2002
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RESULT 15
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C;Date: 02-Dec-1993 #sequence_revision 12-Apr-1996 #text_change 16-Jul-1999
C;Accession: S29819; S74166; S25625
R;Rasmussen, S.K.
                                                                                                                                                                                                                                                                                                                                                                                                                                C;ACCESSION: A26423
R;HL11, R.E.; HASTIE, N.D.
Nature 326, 96-99, 1987
A;Title: Accelerated evolution in the reactive centre regions of serine protease inhibit A;Reference number: A26423; MUID:87144617; PMID:3493437
A;Accession: A26423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               serine proteinase inhibitor 2.1 - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 19-Nov-1988 *sequence_revision 12-Jul-1996 *text_change 12-Jul-1996
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A; Residues: 1-398 <-RAS>
A; Cossidues: EMBL: Z15116; NID: g19070; PIDN: CAA78822.1; PID: g19071
A; Experimental source: strain Villa x Ulla
R; Experimental source: strain Villa x Ulla
R; Dahl, S.W.; Rasmussen, S.K.; Petersen, L.C.; Hejgaard, J.
FEBS Lett. 394, 165-168, 1996
A; Title: Inhibition of coagulation factors by recombinant barley serpin BSZx.
A; Reference number: S74166; MUID: 97000013; PMID: 8843156
A; Accession: S74166
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A;Title: A gene coding for a new plant serpin.
A;Reference number: S29819; MUID:93176798; PMID:8439552
A;Accession: S29819
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Search completed: July 11, 2003, 12:00:36 Job time: 3.52827 secs
                                                                                               В
                                                                                                                                                                                                                                                                                         C; Superfamily: antithrombin III
                                                                                                                                                                                                                                                                                                                                   A;Molecule type: mRNA
A;Residues: 1-213 <HIL>
A;Cross-references: GB:X13149
A;Note: the authors translated the codon CTG for residue 1 as Met, GTG for residue 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Gene: pazx
A; Introns: 136/3
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Best Local Similarity 68.8%;
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159 LDVAETGTEATAATG 173
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Pred. No. 0.084;
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Pred. No. 0.11;
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Q07235 mus musculu P07093 homo sapien p07759 mus musculu P09006 rattus norv P41361 bos teurus P01008 homo sapien P32261 mus musculu P3262 ovis aries P42927 cowpox viru P33829 variola vir P14754 manduca sex Q93k88 mus musculu Q93k88 mus musculu	GDN_MOUSE GDN_HUMAN COTR_MOUSE CP16_RAT ANT3_BOVIN ANT3_HUMAN ANT3_HUMAN ANT3_MOUSE ANT3_SHEEP SP11_COWPX SP11_VARV SERA_MANSE SP12_MOUSE ALIGNMENTS ALIGNMENTS PRT; 380 AA.	397 1 398 1 418 1 433 1 464 1 465 1 355 1 392 1 405 1	61.4 397 61.4 418 61.4 418 61.4 433 61.4 433 61.4 433 61.4 464 60.2 355 60.2 357 60.2 357	34 51 35 51 36 51 37 51 39 51 40 51 40 51 41 51 42 50 44 50 43 50 44 50 50 45 50 47 HUMAN SPD_HUMAN
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J. Biol.
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MEDITINE-9736116; PubMed-9182567;

MEDITINE-9736116; PubMed-9182567;

Tsujimoto M., Tsuruoka N., Ishida N., Kurihara T., Iwasa F.,

Yamashiro K., Rogi T., Kodama S., Katsuragi N., Adachi M.,

Katayama T., Nakao M., Yamaichi K., Hashino J., Haruyama M., Miura K.,

Rakanishi T., Nakaoto H., Teramura M., Mizoguchi H., Yamaguchi N.;

"Purification, cDNA cloning, and characterization of a new serpin with

megakaryocyte maturation activity ";

J. Biol. Chem. 272:15373-15380(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. Clin. Thvest. 102:828-836(1998).

-!- FUNCTION: Might function as an inhibitor of Lys-specific proteases. Might influence the maturation of megakaryocytes via its action as a serpin.

-!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
-!- TISSUE SPECIFICITY: Predominantly expressed in mesangial cells.
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IgA nephropathy.";
J. Clin. Invest. 1
-!- FUNCTION: Migh
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TISSUE-Mesangial cells;
MEDLINE-98376492; PubMed-9710452;
Miyata T., Nangaku M., Suzuki D.,
Okubo K., Kurokawa K.;
Pfam; PF00079; serpin;
SMART; SM00093; SERPIN;
PROSITE; PS00284; SERPI
                                                                                                                                                                                                 EMBL; D88575; BAA31232.1; -
EMBL; AF027866; AAC64506.1;
HSSP; P05619; 1HLE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                megsin (TP55) (Serpin SERPINB7.
                                                                                                                                   Genew; HGNC:13902;
MIM; 603357; -.
                                                                                                    InterPro; IPR000215; Serpin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "A mesangium-predominant gene,
                                                                                                                                                                         SERPINB
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ID SB11_HI
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Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entre the European Bioinformatics Institute. There are no restructe by non-profit institutions as long as its content use by non-profit institutions as long as its content modified and this statement is not removed. Usage by and
  SB11_HUMAN (
Q96P15; Q96P14;
15-JUN-2002 (Re:
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                                                                                                                                                                                                                                                                                                                                                                                           Serpin; Serine protesse inhibitor.

ACT_SITE 343 344 REACTIVE BOND (BY SIMILARITY).

SEQUENCE 378 AA; 42560 MW; 664F499CCFCE263A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00093; SERPIN; 1. PROSITE; PS00284; SERPIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nakaya N., Nishibori M., Kawabata M., Saeki K.; "Cloning of a serine proteinase inhibitor from bovine brain: expression in the brain and characterization of its target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Brain;
MEDLINE-97165893; PubMed-9013786;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bos taurus (Bovine)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BOVIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -I- FUNCTION: MAY BE INVOLVED IN THE REGULATION OF SERINE PRESENT IN THE BRAIN OR EXTRAVASATED FROM THE BLOOD.
-I- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brain Res. Mol.
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30-MAY-2000 (Rel.
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002739;
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ACT_SITE 347 348 REACT
SEQUENCE 380 AA; 42904 MW; 9A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nterPro; IPR000215; Serpin.
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SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PF00079; serpin;
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                                                                                                                                                                                                                                                                                                                    Similarity
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SFVEVTEEGTEAAAATG
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                        STANDARD; Q96P13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brain Res. 42:293-300(1996).
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. 39, Last sequence upo
. 39, Last annotation u
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
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RESULT 4
SB13_HUMAN
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Best Local S
Matches 13
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Q9UTVB; Q9UWG; Q9UKG; Q9HCX1;
P16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Hurpin (HaCaT UV-repressible serpin) (Protease inleadpin) (Serpin B13).
Hemo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebratic Mammalia; Eutheria; Primates; Catarrhini; Hominida
J. Mol.
[2]
                       skin specific, UV-repressible ovalbumin serpin family.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Serpin; SACT_SITE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SERPINB11.
Homo sapiens (Human).
""karyota; Metazoa; Chordata; "
""heria; Primates;
                                                                                                                     MEDLINE-99443898;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUN-2002 (Rel. 41,
15-JUN-2002 (Rel. 41,
Serpin Bl1.
                                                                                                   Abts H.F.,
                                                                                                                                      TISSUE=Skin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entities requires a license agreement (Some send an email to license@isb-sib.ch).
                                                                                     Ruzicka T.;
                                                                                                                                                      SEQUENCE FROM
                                                                                                                                                                                      NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "SERPINB11 is a novel ov-serpin with at least 3 alleles.", Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Silverman G.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.,
                                                                 'Cloning and characterization of hurpin (Protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ptam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro;
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                                                                                                     Welss
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                                                                                                                     PubMed=10512713;
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76.5%;
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Last annotation update)
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Pred. No.
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                                                   serine
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                                                                                                                                                                                                                        Vertebrata;
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                                                   inhibitor
                                                                   Inhibitor 13):
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                                                                                                                                                                                                                        Euteleostomi;
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Best L
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EMBL; AJ001697;
EMBL; AJ001698;
EMBL; AF169949;
EMBL; AF216854;
EMBL; AZ278717;
EMBL; AZ278717;
HSSP; P05120; 1B;
                                                                                                                     Serpin: S
ACT_SITE
VARSPLIC
CONFLICT
CONFLICT
CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWI
between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Sequence, organization, chromosomal localization and alternative splitcing of the human serine protease inhibitor gene hurpin (PII3), which is up-regulated in psoriasis."; DNA Cell Biol. 20:123-131(2001).

-I- FUNCTION: May play a role in the proliferation or differentiation of keratinocytes.
                                                                                                                                                                                                                                                                                                                                                                                                                            between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Abts H.F., Welss T., S
Bird P.I., Ruzicka T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-Placenta;
MEDLINE-21213570;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Genomic cloning, mapping, structure and p
a serpin which is down-regulated in head a
Biochim. Biophys. Acta 1492:441-446(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Spring P., Nakashima T., Frederick M., Henderson Y., Clayman G.; "Identification and cDNA cloning of headpin, a novel differentially expressed serpin that maps to chromosome 18q.";
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MEDLINE=99458661; PubMed=10527881;
                                                                                                                                                                                                                                                         Pfam;
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                                                                                                                                                                                                                                                                                                              Genew;
                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBCELLULAR LOCATION: Cytoplasmic. ALTERNATIVE PRODUCTS: 2 isoforms; 1 produced by alternative splicing. TISSUE SPECIFICITY: SKIN-SPECIFIC.
                                                                                                                                                                                                                                                                                                                         L; AJ001696; CAA04935.2; -.
L; AJ001697; CAA04936.2; -.
L; AJ001698; CAA04937.1; -.
L; AF169949; AAD55765.1; -.
L; AF216854; AAF72879.1; -.
L; AJ278717; CAC03569.1; -.
L; PO5120; 1BY7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SWISS-PROT entry is copyright. It is produced through a collaboration
 334
                                                                                                                                                                                                                                                      Pro; IPR000215;
PF00079; serpir
                                                                                                                                                                                                       SM00093; SERPIN; 1.
; PS00284; SERPIN
                                                                                                                                                                                                                               SM00093;
                                                    l Similarity
13; Conser
                                                                                                                                                                                                                                                                                                          HGNC:8944; SERPINB13
                                                                                                                                                                                                      Serine
 SFVAVTEEGTEAAAATG
                SYIEVTEEGTEATAATG
                                                    Conservative
                                                                                                                                                                                                                                                        serpin;
                                                                                                                  protease inhibitor; Alternative splicing,
8 ST REACTIVE BOND (BY SIMILARITY).
6 257 MISSING (IN ISOFORM 2).
6 S -> N (IN REF. 4).
7 MISSING (IN REF. 4).
8 G -> S (IN REF. 1). CAA04937).
7 297 E -> O (IN REF. 1). CAA04937).
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76.5%;
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                                                    Mismatches
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                                                                                                       CAA04937).
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cancer cells.";
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RESULT
 Matches
            Query Match
Best Local
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                                                                             ACT_SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-placenta;
TISSUE-94183847; PubMed-8136380;
MEDLINE-94183847; PubMed-8136380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HUMAN
                                                    CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                 Pfam; PF00079; serpin; 1. SMART; SM00093; SERPIN; 1.
                                                                                                                                                                                                                EMBL; BC001394; AAH01394.1;
PIR; S35750; S35750.
PIR; A48681; A48681.
                                                                                                                                                                                                                                                                                                entities requires a license agreement (Some send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                         -i- FUNCTION: Inhibits thrombin.
-i- SUBCELULAR LOCATION: Cytoplasmic.
-i- TISSUE SPECIFICITY: HIGHEST LEVELS IN SKELETAL MUSCLE. ALSO FO
IN PLACENTA, CARDIAC MUSCLE, LUNG, LIVER, KINNEY AND PANCREAS.
-i- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Strausberg R.;
Submitted (DEC-2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Complementary DNA cloning and kinetic chaintracellular serine proteinase inhibitor: trypsin and factor Xa as model proteinases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Morgenstern K.A., Sp
Ching A., Kisiel W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Coughlin P., Sun J., Cerruti L., Salem H.H., Bird I "Cloning and molecular characterization of a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-94022386; PubMed-8415716;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM
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                                                                                                                    PROSITE;
                                                                                                                                                                           MIM; 173321;
                                                                                                                                                                                     HSSP; P05120; 1BY7
Genew; HGNC:8950;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-Colon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM
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                                                                                                         Serpin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Biochemistry 33:3432-3441(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
                                                                                                                                                            InterPro; IPR000215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  e proteinase inhibitor.";
Natl. Acad. Sci. U.S.A. 90:9417-9421(1993).
. Similarity 12; Conserv
                                                                                                        Serine protease inhibitor.
                                                                                                                         PS00284; SERPIN;
                                                  175
362
376
 Conservative
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362 9
42590' MW;
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            74.78;
75.08;
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                                                               REACTIVE BOND.
E -> G (IN REF
S -> R (IN REF
            Score 62;
Pred. No.
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2B46A55F40C608C6 (
 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       characterization of a novel
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                            DB
            .0045;
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                         Length 376;
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SFVEVNEEGTEAAAAT

334 16

SYIEVTEEGTEATAAT

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RESULT 6

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ID UTLEU_HU
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RA Remold
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EMBL; AF053630; AAC31394.1; -.
EMBL; BC009015; AAH09015.1; -.
PIR; S27383; S27383.
                                                                                                                                                                                                                                                                                                                                                                          modified and this statement is not removed entities requires a license agreement (See or send an email to license@isb-sib.ch).
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01-APR-1993 (Rel. 25, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Leukocyte elastase inhibitor (LEI) (Monocyte/neutrophil elastase inhibitor) (M/NEI) (EI).
SERPINBI OR ELANH2 OR PI2.
                                                    InterPro; IPR000215; Sepfam; PF00079; serpin; SMART; SM00093; SERPIN;
                                                                                                                               Aarhus/Ghent-2DPAGE; 4314;
Genew; HGNC:3311; SERPINB1.
MIM; 130135; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein database of normal human epidermal keratinocytes.";
Electrophoresis 13:960-969(1992).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Keratinocytes;
MEDLINE=93162043; PubMed=1286667;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zeng W., Silverman G.A., Remold-O'Donnell E.;
"Structure and sequence of human M/NEI (monocyte/neutrophil elastase inhibitor), an Ov-serpin family gene.";
Gene 213:179-187(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=92302296; PubMed=1376927;
Remold-O'Donnell E., Chin J., Alberts M.;
"Sequence and molecular characterization of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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                           PROSITE;
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SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                               P05619; 1HLE.
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                              PS00284; SERPIN;
                                                                                                            IPR000215;
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protease inhibitor.
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RESULT 8
PRTZ_HORVU
ID PRTZ_H
AC P06293
DT 01-JAN
DT 01-NOV

STANDARD;

PRT;

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PRTZ_HORVU P06293; 01-JAN-1988 01-NOV-1991

(Rel. 06, Created)
(Rel. 20, Last sequence update)

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21-JUL-1986
01-APR-1993
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SEQUENCE
                                                                                    CARBOHYD
CARBOHYD
                                                                                                               ACT_SITE CARBOHYD
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                                                                          SEQUENCE
                                                                                                                                                                                                                      entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                 Nucleic Acids Res. 10:4363-4382(1982).
                                                                                                                                                                                                                                                                                                                     "The ovalbumin gene gene.";
                                                                                                                                                                                                                                                                                                                             Heilig R., Muraskowsky R., Kloepfer C., "The ovalbumin gene family: complete se
                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE=83014329; PubMed=7122240;
                                                                                                                                                                                                                                                                                                                                                                                                                  Gallus gallus (Chicken)
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12; Conser
                                              Similarity
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SFVEVNEEGTEAAAAT
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379 AA;
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43772 MW;
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42741 MW;
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BAAE08DFCBCD8CD3 CRC64;
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; Galliformes; Phasianidae; Phasiani
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                                                                           CRC64;
                                     Indels
                                                                                                                                                                                                                                                                                                                              structure
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                                                                                  (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                                                                                                                                                                           restrictions
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                                                                                                                                                                                                                                                                                                                                                                                                Phasianinae;
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                                                                                                                                                                                                                                                                              collaboration
                                                                                                                                                                                                                                                                     outstation
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                                     Gaps
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                                                          Query Match
Best Local S
Matches 12
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RASHUSSER S.K., HOPP H.E., Brandt A., Svendsen I., Hejgaard J.;

"A CDNA clone for protein Z, a major barley endosperm albumin.";

Carlsberg Res. Commun. 49:385-390(1984).

-1- FUNCTION: A MAJOR COMPONENT OF THE ENDOSPERM ALBUMIN, THIS PROTEIN ACTS AS A STORAGE PROTEIN DURING GRAIN FILLING, CONTRIBUTING A SUBSTANTIAL PART OF THE GRAIN'S LYSINE. MAY HAVE AN INHIBITORY FUNCTION DURING FILLING OR GENAINATION.

-1- TISSUE SPECIFICITY: IS ACCUMLATED AND STORED IN THE ENDOSPERM,

WHERE IT EXISTS IN A FREE AND A BOUND FORM.

-1- DEVELOPMENTAL STAGE: SYNTHESIZED 10-25 DAYS AFTER FERTILIZATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-cv. Carlsberg II; TISSUE-SILL., Helygaard J., Rasmussen S.K., Brandt A., Svendsen I.; Helygaard barney between barley endosperm protein inhibitors of the alpha-1-antitrypsin family."; FEBS Lett. 180:89-94(1985).
                                                                                                                          ACT_SITE
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      בייהים בייהים יצורו diplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnollophyta; Lillopsida; Poales; Poaceae; Pooldeae; Triticeae; Hordeum.
                                                                                                                                                                  Pfam; PF00079; serpin; 1.
SMATT; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
Plant defense; Serpin; Storas
DOMAIN 36 56
                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                               PIR; A01252; DXBHZ.
PIR; S13822; S13822.
HSSP; P01008; 1ATH.
                                                                                                                                                                                                                                                                                                             EMBL; X51726; CAA36015.1; -. EMBL; X05902; CAA29331.1; -. EMBL; M35065; AAA32971.1; -.
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                                                                                                                                                                                                                                   InterPro; IPR000215; Serpin.
Pfam; PF00079; serpin; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 220-399 FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "A plant serpin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brandt A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=91099324; PubMed=2269280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
STRAIN-CV. Carlsberg II; TISSUE-Grain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID-4513;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUN-2002 (Rel. 41, Protein Z (Z4) (Major
                                                                                                                                                                                                                                                                                                                                                            urites requires a license agreement (See http://www.isb-sib-send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MISCELLANEOUS: THERE SEEM TO BE TWO Z PRO'CHROMOSOME 4) AND Z7 (FROM CHROMOSOME 7).
SIMILARITY: BELONGS TO THE SERPIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INDUCTION: ITS EXPRESSI
ALLELES LYS1 AND LYS3A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DEVELOPING ENDOSPERM).
INDUCTION: ITS EXPRESSION IS REGULATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dt A., Svendsen I., Hejgaard J.;
lant serpin gene. Structure, organization and
encoding barley protein Z4.";
J. Biochem. 194:499-505(1990).
                             ...
                                                            Similarity
12; Conserv
                 SYIEVTEEGTEATAAT 16
                                                                                                                          357
                                                            Conservative
                                                                                                                          ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Barley).
                                                                                                                          357
43276 MW;
                                                                          72.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last annotation update)
                                                                                                                      Storage protein; Multigene family.
SIGNAL FOR TARGETING PROTEIN
THE ER LUMEN (POTENTIAL).
REACTIVE BOND (POTENTIAL).
276 MW; 023B8E52475ABA56 CRC64;
350
                                                            <u>ب</u>
                                                                          Score 60;
Pred. No.
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                                                            Mismatches
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                                                                          DB 1;
0.011;
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                                                                                           Length 399
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 expression
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RESULT 9
ILEU_PIG
 В
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PTI6_MOUSE
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Best Local S
Matches 11
                                                                                                               Mus musculus (Mouse).
Eukaryota: Metazoa; C
Mammalia; Eutheria; R
NCBI_TaxID=10090;
                             Sun J., Rose J.B., Bird P.;
"Gene structure, chromosomal localization, and murine homologue of human proteinase inhibitor divergence of PI-6 from the ovalbumin serpins."
J. Biol. Chem. 270:16089-16096(1995).
                                                                                                                                                                                                                                                                                                                                                                         DISULFID ACT_SITE
                                                                                                                                                                                                                                                                                                                                                                                              Serpin;
                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P05619; 1HLE.
InterPro; IPR000215; Serpin.
Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. STRAIN-BALB/c; MEDLINE-95332310;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-0CT-1993 (Rel. 27, Created)
01-0CT-1993 (Rel. 27, Last sequence update)
16-0CT-2001 (Rel. 40, Last annotation update)
Leukocyte elastase inhibitor (LEI) (Leucocyte
SEQUENCE FROM
TISSUE-Breast
                                                                                                                                                                     15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Placental through inhibitor (Protease inhibitor
                                                                                                                                                                                                                    PTI6_MOUSE
Q60854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=94039085;
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Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inhibitor) (LNPI).
SERPINB1 OR ELANH2.
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                                                                                                                                                                SERPINB6 OR SPI3
                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sus scrofa
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                                                                                                                                                                                                                                                                                321 AFVEVNEEGTEAAAAT
                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                   SYTEVTEEGTEATAAT
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343
378 AA;
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                                                                                                                                                      (Mouse).
 tumor;
                                                                                                                                                                                                                             STANDARD;
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                                                                                 PubMed-7608171;
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344 F
42512 MW;
                                                                                                                                  Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                71.1%;
68.8%;
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                                                                                                                                                                                                                                                                                                                                 Score 59;
Pred. No.
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REACTIVE BOND (BY SIM
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                                                                                                                                 Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SERPIN FAMILY. OV-SERPIN SUBFAMILY
                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OF THE NEUTROPHIL PROTEASE NASE-3 (By similarity).
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r 6 (PI-6) suggests
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                                                                                                                                                                                                                                                                                                                                         Length 378;
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Sus.
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCC1_HUMAN STANDARD; PRT; 390 AA. P29508; Q96UZ1; 01-APR-1993 (Rel. 25, Created) 15-JUN-2002 (Rel. 41, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Squamous cell carcinoma antigen 1 (SCCA-1) (P. SERPINB3 OR SCCA1 OR SCCA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                  MEDLINE-95241462; PubMed-7724531; Schneider S.S., Schick C., Fish K.E., Miller E., Pena J.C., Treter S.D., Hui S.M., Silverman G.A.; Perocentase inhibitor locus at 18q21.3 contains a tander duplication of the human squamous cell carcinoma antigen gene."; Proc. Natl. Acad. Sci. U.S.A. 92:3147-3151(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., AN MEDLINE=92068241; Pubm Suminami Y., Kishi F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00093; SERPIN; 1. PROSITE; PS00284; SERPIN; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Strausberg R.;
Submitted (APR
                                                                                                                                Strausberg R.;
                                                                                                                                                         TISSUE-Lung
                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                       "Squamous cell carcinoma antigen protease inhibitors.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Serpin; Serine protease inhibitor ACT_SITE 343 344 REACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00079; serpin; 1.
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                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                   Biochem. Biophys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: Inhibits thrombin.
SUBCELLULAR LOCATION: Cytoplasmic.
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; BC006766; AAH06766.1;
; P05120; 1BY7.
MGI:103123; Serpinb6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
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11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Human)
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PubMed=1958219;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42599 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                   Commun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sekiguchi
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Pred. No.
EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REACTIVE BOND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                181:51-58(1991).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Kato H.;
a new member of
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0.015;
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SI
CLOSELY RELATED TO CELLULAR
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TO MODULATE
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RESULT 12
SCC2_HUMAN
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Best Local
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SEQUENCE
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Serpin; Serine protease inhibitor.

SERPIN: 354 355 REACT

ACT_SITE 357 357 T---

COURT TOT 357 357 T---

SERVING TOTAL RESTRICT

RESTR
                                                                                                                                                  MEDLINE-95241462; PubMed=7724531; Schneider S.S., Schick C., Fish K.E., Miller E., Pena J.C., Sretter S.D., Hui S.M., Silverman G.A.; Tretter S.D., Hui S.M., Silverman G.A.; a contains a tandem "A serine proteinase inhibitor locus at 18q21.3 contains a tandem duplication of the human squamous cell carcinoma antigen gene."; proc. Natl. Acad. Sci. U.S.A. 92:3147-3151(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1996 (Rel. 33, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Squamous cell carcinoma antigen 2 (SCCA-2) (Leupin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
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                         "Identification of a novel
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                                                                                 SEQUENCE FROM N.A.
MEDLINE=96013887; PubMed=7589435
                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCC2_HUMAN
P48594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This
                    expression
                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                               SERPINB4 OR SCCA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00079; serpin; 1. SMART; SM00093; SERPIN; 1.
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HSSP; P01008; 1ATH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L; S66896; AAB20405.1; -.
L; U19556; AAA865317.1; -.
L; U19568; AAA86317.1; JOINED.
L; U19560; AAA86317.1; JOINED.
L; U19562; AAA86317.1; JOINED.
L; U19565; AAA86317.1; JOINED.
L; U19567; AAA86317.1; JOINED.
L; U19567; AAA86317.1; JOINED.
L; U19567; AAA86316.1; -.
L; U19567; AAA86316.1; -.
L; U19559; AAA86316.1; JOINED.
L; U19559; AAA86316.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DIFFERENTIATION IN BOTH NORMAL AND MALIGNANT SQUAMOUS CELLS. SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      w; HGNC:10569; SERPINB3.
600517; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              332
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of leupin.";
373:61-65(1995).
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357
390 AA;
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                                                                                                                                                                                                                                                                                                                                                            Chordata;
Primates;
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68.8%;
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T -> A (IN REF. 1).
; E5F27F986C752CFA CRC64;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
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0.015;
                                         gene; cloning sequencing
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                                                                                                                                                                                                                                                                                                                                                                                                                                              SPB8_HUMAN
P50452;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMAN
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SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
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MEDLINE-21167379; PubMed-11267667;
                                                                                                      Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
                                                                                                                                                                                                                         (Serpin B8).
SERPINB8 OR PI8.
                                                                                                                                                                                                                                                                                      01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Cytoplasmic antiproteinase 2 (CAP2) (CAP-2) (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AB035089; BAB21525.1; -. EMBL; BC017401; AAH17401.1; -. HSSP; P01008; lATH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <del>:</del>
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   SEQUENCE FROM N.A
                                                                    WCBI_TaxID-9606
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SUBCELULAR LOCATION: CYCOPLASMIC.
TISSUE SPECIFICITY: SQUAMOUS CELLS.
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY
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E 354 355 REACT
E 390 AA; 44854 MW; 04E
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                          Chordata;
Primates;
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; 04E213CD892587D5 CRC64;
                                                                                                          Craniata; Vertebrata;
Catarrhini; Hominidae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
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0.015;
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                                                                                                              Hominidae;
                                                                                                                                                                                                                                                                                             (Protease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 390;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antigen 1 gene and
                                                                                                                                                Euteleostomi
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A TO CONTRACT OF THE PROPERTY 
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SPB9_HUMAN
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Best Local S
Matches 11
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P50453;
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Schrader S.K., Foster D.C., Kisiel
"Molecular cloning, expression, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Cytoplasmic antiproteinase 3 (CAP3) (CAP-3) (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Serpin; Serine protease inhibitor. ACT_SITE 339 340 REACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; L40377; AAC41939.1; -. HSSP; P05120; 1BY7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for commodified and this statement is not removed.
                                                                    TISSUE-Placenta, and Bone marrow;
MEDLINE-97066975; PubMed-8910377;
Sun J., Bird C.H., Sutton V., McDonald L.,
Trapani J.A., Bird P.I.;
                                                                                                                                                                                                                                                MEDLINE=96102039; PubMed=8530382; Sprecher C.A., Morgenstern K.A., Mathewes S. Schrader S.K., Foster D.C., Kisiel W.; "Molecular cloning, expression, and partial novel members of the ovalbumin family of serinhibitors.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genew; HGNC:8952; MIM; 601697; -.
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-1- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J. Biol.
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"A cytosolic granzyme B inhibitor related regulator cytokine response modifier A is lymphocytes.";
                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-Placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human)
Eukaryota; Metazoa; (
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SERPINB9 OR PI9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inhibitors.";
J. Biol. Chem. 270:29854-29861(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=96102039; PubMed=8530382;
                                                                                                                                                                                                                           J. Biol.
                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR000215; Serpin.
                                                                                                                                                                           SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Serpin B9)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity
11; Conserv
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                                                                                                                                                                                                                           Chem.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374 AA;
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                                                                                                                                                                           N.A.
                                                                                                                                                                                                                           270:29854-29861(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    statement is not removed. Usage by and for commercial a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SERPINB8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expression, and partial characterization ovalbumin family of serine proteinase
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Pred. No.
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0.022;
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                                                     to the viral apoptotic
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                           present
                                                                                                     Coughlin P.B.,
                                                                                                                                                                                                                                                                                                     characterization
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                                                                                                                                                                                                                                                                                                                                                Dahlen
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                                                                                                                                                                                                                                                                           proteinase
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                                                                                                                                                                                                                                                                                                                                                  J.R.
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                                                                                                     Jong
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                                                                                                       T.A.,
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NEUS_RAT
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                           "Neuroserpin is expressed in the pituitary and adrenal glands and induces the extension of neurite-like processes in AtT-20 cells."; Biochem. J. 345:595-601(2000).

-i- FUNCTION: SERINE PROTEASE INHIBITOR THAT INHIBITS PLASMINOGEN ACTIVATORS AND PLASMIN BUT NOT THROMBIN. MAY BE INVOLVED IN THE FORMATION OR REORGANIZATION OF SYNAPTIC CONNECTIONS AS WELL AS FOR SYNAPTIC PLASTICITY IN THE ADULT NERVOUS SYSTEM. MAY PROTECT NEURONS FROM CELL DAMAGE BY TISSUE-TYPE PLASMINOGEN ACTIVATOR (By
        This
                                                                                                                                                                                                                                                                                                                                                Birch N.P.;
                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-Pituitary;
MEDLINE-20115094;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9JLD1; Q9JLD1;
15-JUN-2002 (Rel. 41, Careated)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Neuroserpin precursor (Protease inhibitor 17).
SERPINII OR PI12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00284; SERPIN; 1.
Serpin; Serine protease inhibitor.
ACT_SITE 340 341 REACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               use by non-profit institutions as long modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
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- I- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation between Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted
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[3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rattus norvegicus (Rat).
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                                                                                                                                                                                                                                                                                                                                                                MEDLINE-20115094; PubMed-10642518; MEZEY E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR000215; Serpin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VEUS_RAT
                                             similarity).
SUBCELLULAR LOCATION: Secreted (By similarity).
SIMILARITY: BELONGS TO THE SERPIN FAMILY.
        SWISS-PROT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601799;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HGNC:8955; SERPINB9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         376 AA;
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CONFLICT
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the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by an
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                                                                                                                                                                                                                                   SEQUENCE
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REACTIVE BOND (BY SIMILARITY).
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1 SYIEVTEEGTEATA
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1: sp_archea:*
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6: sp_mammal:*
7: sp_mhc:*
8: sp_organel:*
9: sp_plage:*
10: sp_plant:*
11: sp_rodent:
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68.7	68.7	68.7	68.7	68.7	•	•	•	69.9	•	•	71.1	71.1	71.1	71.1	71.1	72.3	•	72.3	•	•	74.7	74.7	74.7	74.7		74.7	78.3	79.5
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Query Match	SEQUENCE	-	מונות ליות	SMART: SMOOD93: SERPIN:	Pfam; PF00079; serpin;	InterPro; IPR000215; Serpin.	HSSP; P05120; 1BY7.	EMBL; AJ293568; CAC21387.1;	-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY.	Thesis (20)	Lee H.J.;	SEQUENCE FROM N.A.	<u>3</u>	Virology 281:170-192(2001).	"The genome sequence	Lee H.J., Essani K.,	MEDLINE-21176366; PubMed-11277691;	SEQUENCE FROM N.A.		ш	Lee H.J.;	UENCE	Ξ	NCBI_TaxID=132475;	Yatapoxvirus	Viruses; dsDNA viruses,	Yaba-like disease virus	149R.	149R protein	01-JUN-2002	01-MAR-2001	01-MAR-2001	Q9DHG4;	00000
	334 AA;	FOODSON, SERVETIN,	200391 - 25	0093: SERP	079; serpi	IPR000215;	20; 1BY7.	3568; CAC2	RITY: BELO	00). Sir W		ROM N.A.		81:170-192	e sequence	Essani K.,	176366; Pu	ROM N.A.		(JUL-2000) to the		FROM N.A.		-132475;	ıs.	sDNA virus	disease vi		in.		_	l (TrEMBLrel.	TRECEMENANT	2001
86.7%;	38190 MW;	WEIN, I.	BDIN: 1	IN: 1	n; 1.	Serpin.		1387.1;	NGS TO T	illiam D				(2001).	of Yaba-like	Smith G.L.	bMed=112										rus (YLDV).			21,	16,	16,	PKI.	
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2: DB 12:	D7FD004191B3C19F								N FAMILY.	ol of Patho					disease virus, a					EMBL/GenBank/DDBJ d						; Poxviridae;				annotation update)	sequence update		334 AA.	3
Length :	CRC64;								,	logy, Un:										databases						e; Chordo				ate)	e)			
334;	٠									Thesis (2000). Sir William Dunn School of Pathology, University of.					yatapoxvirus.";					•						Chordopoxvirinae;								

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PROSITE; PS00284; SERPIN; UNKNOWN_1.

SEQUENCE 380 AA; 43050 MW; C9240272BCFB9CF4 CRC64;
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EMBL; AK014524; BAB29410.1;
EMBL; AF105328; AAL16768.1;
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Yagi M., Nagano N., Inagi R., Kurokawa K.;
"Cloning of rodent megsin revealed its up-regulation in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-SKIN;
MEDLINE-21085660; PubMed-11217851;
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SERPINB7 OR 4631416M05RIK.
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10090
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [nterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; P05121; 1A7C.
MGI:2151053; Serpinb7.
rPro; IPR000215; Serpin.
                                                                                                                                       325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        277
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PF00079; serpin; 1
                                                                                                                                                                                                                                                       14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                    SFIEVSEEGTEATAAT 340
                                                                                                                                                                                            SYIEVTEEGTEATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SYIEVTEEGTEATAAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata;
Rodentia;
                                                                                                                                                                                                                                                                            83.1%;
87.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                            Score 69; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                            DB 11;
0.0027;
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                                                                                                                                                                                                                                                                                                      Length 380
                                                                                                                                                                                                                                                    Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schrim I., M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Hofmann M., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Rodriguez I., Sakamoto N.,
Ra Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
Waynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
Hayashi, Raki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY. EMBL; BC010313; AAH10313.1; -: VGD; MGI:1914207; 2310046Mnpb:
                                                                                                                                                                                                                                                                                                                                                           01-DEC-2001 (TrEMBLrel. 19,
01-DEC-2001 (TrEMBLrel. 19,
01-JUN-2002 (TrEMBLrel. 21,
RIKEN CDNA 2310046M08 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Alayashizaki Y.;
"Functional annotation of a full-length mouse cDNA collection.";
Nature 409:685-690(2001).
EMBL; AK009855; BAB26546.1; -.
EMBL; AK009003; BAB26017.1; -.
                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q91Z12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q91Z12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2001
01-JUN-2001
                                                                                                                                                            SEQUENCE FROM
                                                                                                                                                                                                              NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                   2310046M08RIK.
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P05619; 1HLE.
P05619; 2310046M08Rik
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
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                                                                                                                                                            N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA;
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                                                                                                                                                                                                                                           Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RPIN; 1.
43482 MW;
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Rodentia;
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76.5%;
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17,
21,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
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Last annotation update)
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Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 69;
Pred. No.
                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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Length 388;

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SQ

Serpin.

SEQUENCE

388 AA;

43544 MW;

AF4BB62FB084E6FA CRC64;

83.1%; 76.5%;

DB 11; 0.0028;

Length 388

InterPro; IPR000215; St
Pfam; PF00079; serpin;

Serpin

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RESULT
Q9D154
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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Arakawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Salto T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume J.A., Kamiya M., Lee N.H.,
RA Gustincich S., Ringwald M., Rodriguez I., Sakamoto N.,
Ra Mynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashiozki Y., Storch K., F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 13
                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                            Query Match
Best Local
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01-JUN-2001
01-JUN-2001
01-JUN-2002
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUN-2001 (TrembLrel. 17, 01-JUN-2002 (TrembLrel. 21, 1190005M04R1k protein, SERPINBLA OR 1190005M04RIK.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nature 409:685-690(2001).
-!- SIMILARITY: BELONGS TO :
EMBL; AK008914; BAB25964.1;
HSSP; P05619; 1HLE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-C57BL/6J; (MEDLINE-21085660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MGD; MGI:1913472; Se
InterPro; IPR000215;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PF00079; serpin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                332
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                                                                                                                                                                                                                                               Similarity 76.1
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SYVDVNEEGTEAAAATG
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                                                                                                                            SFVEVNEEGTEAAAATG
                                                                                                                                                                               SYIEVTEEGTEATAATG
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                                                                                                                                                                                                                                                                                                                                                                                                                                     SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Serpinbla
                                                                                                                                                                                                                                                                                                                                                                        42580 MW;
                                                                                                                                                                                                                                                                         81.9%;
76.5%;
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Last annotation updat
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Pred. No.
                                                                                                                                                                                                                                            Score 68; DB 11;
Pred. No. 0.004;
2; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; I
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SERPIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                        193728585077AB4B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                                                                                                                                                     Length 379;
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; Murinae; Mus
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RESULT Q9D1Q5

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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Arakawa T., Hara A., Fukunishi Y., Konno S., Yamanaka I.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Salto T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Salto R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuchl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Ouackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Brownstein M.J., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Brownstein M.J., Mashima J., Mazzarelli J., Mombaerts P.,
RA Mordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
Ra Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.,
RA Marushizaki Y., Storch K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Nature 409:685-690(2001).
                                                                                                                                                    Query Match
Best Local
                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                         MSSP; 905619; 1HLE.
MGD; MGI:1913472; Serpinbla.
InterPro; IPR000215; Serpin.
Pfam; PF00079; Serpin; 1.
SMART; SM00093; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ragoussis J., Bird P.I.;
"Comparison of human chromosome 6p25 with murine chromosome 13 a greatly expanded Ov-serpin gene repertoire in the mouse.";
Genomics 0:0-0(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-C57BL/6J; TISSUE-EMBRYO; MEDLINE-21085660; PubMed-11217851; Kawai J., Shinagawa A., Shibata K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
119005M04Rik protein (RIKEN CDNA 119005M04 gene) (EIA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9D154
Q9D154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-C57BL/6J; TISSUE-SPLEEN;
Kaiserman D., Knaggs S., Scarff K.L.,
McKeone R., Denny P., Cooley J., Benar
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Submitted (
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (Mouse)
Eukaryota; Metazoa; (
                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -i - SIMILARITY: BELONGS TO THE EMBL; AKO03930; BAB23079.1; - EMBL; BC011140; AAH11140.1; - EMBL; AF426024; AAL57486.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN-C57BL/6J; T
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STRAIN=C57BL/6J; I
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                                                                                                                                                                                                                                                                                                               PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=COLON;
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   322
                                                                                                                          Similarity
13; Conserv
|::|| ||||| |||||
SFVEVNEEGTEAAAATG
                                                                                                                                                                                                                                                                                                               PS00284; SERPIN; 1.
                                                             SYIEVTEEGTEATAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (JUL-2001) to the
                                                                                                                                                                                                                                                     379
                                                                                                                          Conservative
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                                                                                                                                                                                                                                                  AA;
                                                                                                                                                                                                                                                     42575 MW;
                                                                                                                                                       81.9%;
76.5%;
   338
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                                                                                                                                                    Score 68; [Pred. No. 0.
                                                                                                                                                                                                                                                     F492F1EEB88E80B1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SERPIN FAMILY
                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Benarafa
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arafa C.,
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                                                                                                                                                                                    DB 11; Length 379;
                                                                                                                                                          .004;
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Remold-O'Donnell E.,
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RESULT 8
Q9222
ID Q9222
AC Q922
AC Q922
DT 01-M
DT 01-D
DE Squa
GN SCCA
OS Mus
OC Euka
OC Mamu
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DITION
DITIO
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RX MEDLINE-21085660; PubMed-1121781;
RA Mawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Kawai J., Shinagawa A., Shibata K., Konno H., Adachi J., Fukuda S.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Kasukawa T., Saito R.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Aizawa K., Jawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kuchil P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuchil L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Ausushi H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 13
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01-MAY-1999 (TrEMBLrel. 1
01-MAY-1999 (TrEMBLrel. 1
01-DEC-2001 (TrEMBLrel. 1
01-DEC-2001 (TrEMBLrel. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nature 409:685-690(2001).
-1- SIMILARITY: BELONGS TO THE EMBL; AK003220; BAB22650.1; -. HSSP; P05120; 1BY7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q9D1Q5 PRELIMINARY; PRT; 387 AA.
Q9D1Q5;
01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
18 days embryo cDNA, RIKEN full-length enriched library,
clone:1110001H02, full insert sequence.
                            MEDLINE-99047536;
                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                            SCCA2
                                                                                                                                                                                                                                                                                                                                                                                     Q9Z2G2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MGD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                             Mus musculus (Mouse)
                                                                                                                                                                                                                                                   Squamous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00284; SERPIN; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                              NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Functional annotation of a full-length mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           layashizaki
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                   cell carcinoma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IPR000215; Serpin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s (Mouse).
Metazoa; Chordata; C
Metazoa; Rodentia; C
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                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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PubMed=9828132;
machi Y., Schick
                                                                                                                                       Chordata;
Rodentia;
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Pred. No. 0.00
2; Mismatches
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                                                                                                                                     Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                        PRT;
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                                                                                                                                                                                                                                                                          update)
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                                                                                                                                     Euteleostomi;
; Murinae; Mus
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                                    Q8WSY0;
Q8WSY0;
01-MAR-2002
01-MAR-2002
01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                          Q9NFT6;
Q9NFT6;
01-OCT-2000
01-OCT-2000
01-JUN-2002
                 Serpin.
SPIZIF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inhibits chymotrypsin-like serine proteinases Genomics 54:297-306(1998).
-i-SIMILARITY: BELONGS TO THE SERPIN FAMILY.
EMBL; AF063937; AAC95432.1; -.
HSSP; P05120; 1BY7.
                                                                                                                                                                                                                                                             "Serine protease inhibitors of Anopheles gambiae."; Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases. EMBL, AJZ71352; CB69784.1; -...HSSP; P01008; IATH.
                                                                                                                                                                                                                                  Pfam; PF00079; serpin; 1. SMART; SM00093; SERPIN; 1
                                                                                                                                                                                                                                                                                                                                                  Pterygota;
Anopheles.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Silverman G.A., "A murine ortholog of the
 Eukaryota;
           Anopheles
                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                Protease.
                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                      InterPro;
                                                                                                                                                                                                                                                                                                    Danielli A., Kafatos
                                                                                                                                                                                                                                                                                                            STRAIN-4A R/R;
                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=7165;
                                                                                                                                                                                                                                                                                                                                                                     Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                              Anopheles
                                                                                                                                                                                                                                                                                                                                                                                                 Putative
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gambiae (A
; Metazoa;
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                                                                                                                                                                                                                                                     IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                                                         gambiae (African malaria mosquito).
; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
; Neoptera; Endopterygota; Diptera; Nematocera; Culi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          388
                                     (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel.
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(African malaria mosquito)
1; Arthropoda; Tracheata; H
                                                                                                                                                                                                                         SERPIN; UNKNOWN_1.
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76.5%;
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OBWSX8;
O1-MAR-2002 (TremBLrel. 2
O1-MAR-2002 (TremBLrel. 2
O1-JUN-2002 (TremBLrel. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Danielli A., Kafatos F.C.;
"Serine protease inhibitors of Submitted (JAN-2000) to the EEMBL; AJZ71353; CAB69785.1;
HSSP; P01008; 1ATH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q9NFT5;
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"Isolation and characterisation of four alternatively spliced serpin
"ariants in the mosquito Anopheles gambiae.";
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; Ad420785; CAD12781.1;
EMBL; AC420785; CAD12781.1;
InterPro: IPR000115; Serpin.
Pfam; PF00079; Serpin; 1.
SMART; SM00093; SERPIN; 1.
SMART; SM00093; SERPIN; UNKNOWN_1.
PROSITE; PS00284; SERPIN; UNKNOWN_1.
                                        Serpin.
SPI21F.
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Putative serine protease inhibitor.
Anopheles gambiae (African
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00079; serpin; 1. SMART; SM00093; SERPIN; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42577 MW;
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21,
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EMBL/GenBank/DDBJ databases
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2; Mismatches
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   RESULT 13
Q917G5
ID Q917G
AC Q917G
DT Q1-M*
DT Q
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RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Adams M.D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Ballew R.M., Dayle C., Baxter E.G., Helt G., Nelson C.R., Millos G.L.G.,
RA Abril J.F., Aphayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beesson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Gedson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Gedson K., Coup F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Helman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Helman T.J., Wei M.-H., Ibegwam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Krantison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Krantison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Krantison J.M., Nelson D.L.,
RA Mount S.M., Welson K.A., Nowahara Y., Welson M., Nelson K.,
RA Katchum 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2001
01-MAR-2001
01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q917G5
Q917G5;
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Danielli A., Loukeris T.G., Kafatos F.C.;
"Isolation and characterisation of four alternatively spliced "alternative in the mosquito Anopheles gambiae.";
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ420785; CA012783.1; -.
Interpro; IPR000215; Serpin.
pfam; pF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; UNKNOWN_1.
SEQUENCE 380 AA; 42582 MW; C3FE91D55DF2450B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sp4 protein.
SP4 OR CG9453.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-20196006;
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[1]
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Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ephydroidea;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=10731132;
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76.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
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Pred. No.
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RESULT

QUILT

Q
     RESULT 15
Q8TOM5
ID Q8TOM
AC Q8TOM
DT 01-JU
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Best Local :
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Best Local :
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Q8T0M5;
Q8T0M5;
01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.

Han J.H., Zhang H., Min G.S., Hashimoto C.;
Han J.H., Zhang H., Min G.S., Hashimoto C.;
"Identification of functional Drosophila serpins.";
"Identification of functional Drosophila serpins.";
Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databine.

SUBMILARITY: BELONGS TO THE SERPIN FAMILY.

EMBL, AJZ51747; CAB63099.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation updato)
Serine protease inhibitor (Serpin-4).
SP4 OR CG9453.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9U115;
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EMBL; AE003790; AAGC2209.1; -. HSSP; P01008; 1ATH.
                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00014; ER_TARGET; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FlyBase; FBgn0028985; sp4.
InterPro; IPR000886; ER_target.
InterPro; IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AJ251747; CAE
HSSP; P01008; 1ATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00079; serpin; 1.

SMART; SM00093; SERPIN; 1.

PROSITE; PS00014; ER_TARGET; UNKNOWN_1.

SEQUENCE 392 AA; 44127 MW; 5D221529C5E0822E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FlyBase; FBgn0028985; sp4.
InterPro; IPR000886; ER_target.
InterPro; IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                 Protease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophila melanogaster (Fruit fly).
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                                                                                                                                                                                                        l Similarity
13; Conserv
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13; Conserv
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                                                                                                                                                                                 AFIEVNEEGTEAAAATG
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                                                                                                                                                                                                                                                                                                                                                                                 Serpin.
392 AA; 44133 MW;
  (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                     Conservative
                                                    PRELIMINARY;
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                                                                                                                                                                                                                                                                                                       79.5%;
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  Created)
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                                                                                                                                                                                                                                                                                                             Pred.
                                                                                                                                                                                                                                                                                                             Score 66; I
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Pred. No. 0.009;
                                                    PRT;
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                                                                                                                                                                                                                                                                                                                                                                                    0A01CF14D3B85B9F CRC64;
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                                                                                                                                                                     Query Match
Best Local
                                                                                                               Matches
rch completed: July time: 10.422 secs
                                                                                                                                                                          Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Farfan D., Frise E., George Gonzalez M., Guarin H., Li P., Li P., Miranda A., Mungall C., Nunco J., Pacleb J., Paragas V., Park S., Phouanenavong S., Wa Yu C., Lewis S.E., Rubin G.M., Celniker S.; Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AY 0069173; AAL39318.1; -
                                                                                                                                                                                                                                                                                                                       Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID-7227;
                                                                                                                                                                                                                                                                                                                                                                                                            GH21896p.
                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-2002 (TrEMBLrel. 01-JUN-2002 (TrEMBLrel.
                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                               STRAIN-BERKELEY;
                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                       358
                                                                                                              l Similarity
13; Conserv
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                                                       AFIEVNEEGTEAAAATG
                                                                                  SYIEVTEEGTEATAATG
                                                                                                                                                                     418 AA;
                                                                                                              Conservative
           11,
                                                                                                                                                                     46961 MW;
                                                                                                                         79.5%;
             2003, 11:58:57
                                                                                                                                                                                                                                                                                                                                                                                                                         21, Last sequence update)
21, Last annotation update)
                                                       374
                                                                                  17
                                                                                                            2;
                                                                                                                         Score 66; DB 5;
Pred. No. 0.0096;
                                                                                                                                                                    D956A2C04339B5E0 CRC64;
                                                                                                            Mismatches
                                                                                                            2
                                                                                                                                        Length 418;
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page

page 2

Fri Jul 11 15:11:04 2003

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Query Match
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AAY08254
ID AAY0
XX AAY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human MDF can be isolated from a culture of human epidermoid exercinoma A431 cells in protein free medium. The MDF stimulates afferentiation of megakaryocytes from myeloid cells in the presence differentiation of megakaryocytes from myeloid tells in the useful of II-3. The MDF acts in vivo as a thrombopoletin making it useful for treatment of diseases involving a decrease in platelet number for treatment of diseases involving a decrease in the marrow for treatment of diseases involving a decrease in the control of treatment of diseases involving a decrease in the marrow for treatment of diseases involving a decrease in platelet number for treatment of diseases involving a decrease in platelet number at the marrow and in chemotherapy. MDF has mol.wt. 55-57kD by transplantation and in chemotherapy. MDF has mol.wt. 55-57kD by SDS-PAGE and exhibits an isoelectric point of 6.0-7.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New megakaryocyte differentiation factor - isolated from human New megakaryocyte differentiation factor - isolated from human epidermoid carcinoma cells, used to treat conditions involving a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           decrease in platelets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY08254 standard; protein; 380 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   y match 100.0%;
Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Megsin; mesangial cell; treatment; diagnosis; disease; IgA nephropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human; rat; murine.
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289 QYLRALGLK 297
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                                                                                                                                                                                                                         sapiens.
                                                                                                                    Matches
                                                                                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380 AA;
                                                                                                                                                                     Proteins from human, rat and useful for the treatment and diagno. Such as 19A nephropathy.
                                                                                                                               Local
                                                                                                                                                                                                                                                                                                       This invention describes
                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-. 98WO-JP04269.
                                                           I Similarity 100.0%;
9; Conservative 0;
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pred. No. 1.1;
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Pred. No.
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                                                                                     protein is expressed the invention are hope invention are hope in a contract the contract that is not that is not the contract that is not that is not the contract that is
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Indels
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RESULT 4 AAB83075

AAB83075 standard;

Protein; 380 AA.

AAB83075;

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Matches

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AAB24142
ID AAB2
XX AAB2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB24142 standard; protein; 380 AA.
                                                                        XX The present invention describes a method for evaluating renal function. CC The method comprises assaying megsin protein antibody for diagnosing CC The method comprises assaying megsin protein antibody for diagnosing CC The method comprises of a antimegsin protein antibody for described are: (1) use of a antimegsin protein megsin protein send (2) a kit for detecting megsin protein expension and cc renal function; and (2) a kit for detecting megsin protein and function and cc renal function; and (2) a the antibody to the particles; and cc (a) direct or indirect fixing for the antibody to the particles; and cc (b) direct or The process is useful for evaluating renal function and cc (c) a magnet. The disorders by assaying megsin protein in biological diagnosing renal disorders by assaying megsin protein the human megsin cc samples (preferably urine or blood). The process is reproducible and cc samples (preferably urine or blood) sequence represents the human megsin cc samples (preferably urine or blood) sequence represents the human megsin cc gives accurate results. The present sequence represents the human megsin cc gives accurate results. The present sequence represents the human megsin cc gives accurate results. The present sequence represents the human megsin cc gives accurate results.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB24142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Megsin; mesangium-predominant gene; serpin regulated; nephropathy; mesangium-predominant gene; renal function; renal disorder; rgh; immunoglobulin h; detection; renal runne.

Igh; immunoglobulin h; detection; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human megsin protein sequence SEQ ID NO:2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200057189-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-MAR-2000; 2000WO-JP01646.
                                                                                                                                                                                                                                                                                                                                                                                                                   (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND LTD.
(FUSO ) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  289 QYLRALGLK 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 QYLRALGLK 9
                                                                                                                                                                                                                                                                                                                                                                                         Miyata T;
                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-611642/58.
                                                                                                                                                                                                                                                                                                          Evaluating renal function comprises assaying megsin protein in
                                                                                                                                                                                                                                                                                                                                           N-PSDB; AAA99294.
Query Match
Best Local Similarity
Best Local 9; Conserv
                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99JP-0306623.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99JP-0075305.
                                                                380 AA;
   Conservative
                             100.0%;
                   Score 44; DB 21;
pred. No. 1.1;
0; Mismatches
                      0
                                                                   Length 380;
                                          Indels
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RESULT 5
AAR57111
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Best Local S
Matches 9
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EP583884-A
                                         Key
                                                                                            Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet;
                                                                                                                                                                                                 AAR57111 standard;
                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4; Page 44-46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and screening of new treatments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-300136/31.
N-PSDB; AAF82438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Miyata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-OCT-2000; 2000WO-JP06988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-APR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human megsin protein
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                                Misc-difference
                                                                                                                                Human
                                                                                                                                                     16-AUG-1994
                                                                                                                                                                           AAR57111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse model for mesangial cell proliferative nephritis for development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                 Homo
                                                                                                                                                                                                                                                                                                    Local Similarity
les 9; Conserv
                                                                 sapiens
                                                                                                                                                                                                                                                        289 QYLRALGLK 297
                                                                                                                                megakaryocyte
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                                                                                    transplantation;
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                                         Location/Qualifiers
                    /note-
                                                                                                                                                                                                peptide;
                                                                                                                                differentiation
                                                                                                                                                     entry)
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                    "not determined"
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                                                                                   cancer chemotherapy
                                                                                                                                                                                                                                                                                                              Score 44;
Pred. No.
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                                                                                                                               factor peptide
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RESULT 6
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF at the presence of IL-3. The MDF at the making it useful for treatment of diseases involving a decrease in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy, MDF has mol. wt.
                                                                                                                                                                       Guanine nucleotide binding protein; GTP-binding protein; G-proterns; GTPase associated protein; GTPAP, coall proliferation; autoimmune; inflammatory; immune system disorder; cancer; AIDS; acquired immune deflicency syndrome; asthma; atherosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               55\text{-}57\text{kD} by SDS-PAGE, exhibits an isoelectric point of 6.0-7.0 and contains an amino acid sequence comprising at least one of the sequences AAR57107-R57115.
                                                                                                                                                            acquired immune defi
arthritis; systemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUL-1992;
04-MAR-1993;
            Modified-site
                                                                                                      Domain
                                                                                                                                                                                                                                  Human GTPase associated protein-12.
                                                                                                                                                                                                                                                       03-NOV-2000 (first entry)
                                                                                                                                                                                                                                                                                 AAY99661;
                                                                                                                                                                                                                                                                                                       AAY99661
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 19; 47pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     decrease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New megakaryocyte differentiation factor - isolated from human epidermoid carcinoma cells, used to treat conditions involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1994-058782/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tsujimoto M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ishida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SUNR )
(TSUJ/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUL-1993;
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                                                         Modified-site
                                                                                Modified-site
                                                                                                                                        Homo sapiens.
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8; Conserv
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                                                                                                                                                                                                                                                                                                        standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                 YLRALGLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in platelets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Iwasa F, Ku
M, Tsuruoka
                                                                                                                                                                                                                                                                                                                                                                                                                                                           9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92JP-0212305
93JP-0067339
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                                                                                /label=
57
            /label=
99
                                   /note=
96..110
                                                         /note= "Potential phosphorylation site" 67
/note= "Potential phosphorylation site"
                                                                                                               Location/Qualifiers
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                                                                                                                                                              SndnT
                                                                                                                                                                                                                                                                                                                                                                                                                         88.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Z
                                            "Potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             English.
                    Beta_transducin
                                                                                         Beta_transducin
                                                                                                                                                              erythematosus;
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Yamaguchi N,
                                                                                                                                                                                                                                                                                                        694
                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 39;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                           phosphorylation
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7.8e+05;
hes 0;
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Yamaichi K;
                                                                                                                                                              psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 9;
                                            site"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of human
                                                                                                                                                                                                          G-protein;
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0;

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23-NOV-1998;
04-FEB-1999;
06-APR-1999;
                                        Human cDNA libraries from various tissues were screened for GTPase associated proteins (GTPAP). The present sequence is human GTPAP-12 protein. This sequence was derived from a cDNA library of the prostate tumour tissue removed from a 65 year old male. This protein is expressed in reproductive, haematopoietic/immune and gastrointestinal tissue. The GTPAP proteins may be used to define agonists and antagonists of GTPAP activity and to generate antibodies to GTPAP. This means the GTPAP proteins may be useful for treatment of
                                                                                                                                                           Human GTPase associated proteins, useful for diagnosing, preventing atherosclerosis, cancer, acquired
                                                                                                                                                                                                                             Hillman JL, Tang Y
Yang J, Azimzai Y;
                                                                                                                                                                                                                                                                                                                                     02-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                     Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified-site
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                                                                                                                                 Claim
                                                                                                                                                                                                                                                         (INCY-) INCYTE PHARM
                                                                                                                                                                                                                                                                                                                  23-NOV-1999;
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and treating various diseases such
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prevention of diseases associated with GTPAP such as cell proliferation disorders, autoimmune disorders, inflammatory disorders, immune system disorders, cancer, AIDS, asthma, atherosclerosis, arthritis, systemic

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Best Local :
                                                                                  diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                 polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binde, as molecular weight merkers and as it imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in disputations of states of the polypeptide and polynucleotide sequences have applications in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 20; SEQ ID No 36588; 103pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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N-PSDB; AAS70416.
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food supplement; medical imaging; diagnostic; genetic disorder.
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 Resistance gene;
pest resistance;
crop protection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              This represents a C. amalonatious maleate isomerase. Host cells transformed with a vector comprising the DNA are used for the recombinant expression of the protein. The maleate isomerases of the invention isolated from P. fluorescens and C. amalonaticus are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Citrobacter amalonaticus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C. amalonaticus
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 6; Page 11-12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New maleate isomerase useful for production of L-aspartic
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                                                                       Lettuce resistance protein RLG2A.
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DB; AAX32470.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                142 QYLEALGL 149
                                                                                                                                                                                                                                                                      228
                                                                                                                                                                                                                                                                                                       1 QYLRALGLK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 QYLRALGL 8
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7; Conserv
                                                                                                                                                                                                                                                                                                                                          7; Conser
                                                                                                                                                                                                                                                                      QMLKALGLK 236
                                                                                                                                                                                                                                                                                                                                                                                                              250
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                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                              ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SHOKUBAI CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97JP-0276261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98EP-0308213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mukouyama M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     maleate isomerase
RLG2A; RG2A; lettuce; disease resistance; virus; fungus; protozoon; bacterium; nema transgenic plant.
                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77.38;
                                                                                                                                                                                                                                                                                                                                                         75.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21pp; English
                                                                                                                                                                              1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 34; DB
Pred. No. 61;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            250
                                                                                                                                                                                                                                                                                                                                        1:
                                                                                                                                                                                                                                                                                                                                                       Score 33; DB 20;
Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Yasuda
                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22;
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                                                                                                                                                                                                                                                                                                                                                                         Length 250;
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                      nematode;
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                                                                                                                                                                                             RESULT 10
AAU95473
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence represents lettuce RLG2A resistance protein, and additionally considered from the RLG2A gene (see AAV44199) isolated from lettuce cultivar Diana genomic DNA. RG (or RLG) families RG1-RG5 and RG7 have been identified, each RG family being defined as a group of polypeptide sequences that have at least 60% amino acid sequence identity. Individual members of an RG family typically map to the same genomic locus. RG nucleic acid sequences (see AAV44188-257) can be used to confer resistance in plants to a variety of pests, including viruses, fungi, nematodes, insects and bacteria. Sequences from within the RG genes can be used to fingerprint cultivars or germplasm for the presence of desired resistance genes. Antibodies to RG proteins (see AAW64180-98) are useful for detecting the type and amount of RG protein expressed in a plant
                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New resistance gene nucleic acids - useful to produce disease resistant plants, e.g. lettuce, Lactuca sativa, and to detect resistance genes, e.g. to fingerprint cultivars
   Lactuca sativa
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; AAV44199
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                      Plant; lettuce;
                                                                                                          02-JUL-2002
                                                                                                                                             AAU95473;
                                                                                                                                                                            AAU95473 standard; Protein; 1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 37; Page 77;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Meyers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lactuca sativa.
                                                                         Lettuce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9830083-A1
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                                                                                                                                                                                                                                                                                                    1 QYLRALGLK 9
                                                                       pest
                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                    QYMREMGIK
                                                                                                                                                                                                                                                                                                                                                                                                              1365
                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                       resistance protein
                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                            À
                                    resistance gene; plant downy mildew; RG; transgenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1086
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             183pp;
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                                                                                                                                                                                                                                                                                                                                                         75.0%;
55.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shen
                                                                                                                                                                                                                                                                                                                                                       Score 33; DB 19;
Pred. No. 6.5e+02;
                                                                       RG2A #1
                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                                                                                                                                                       Length 1365;
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RESULT 11
AAW64176
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 included is a transgenic plant comprising a heterologous expression cassette containing a promoter operably linked to an RG2B polynucleotide encoding a polypeptide conferring resistance to plant downy mildew and hybridises to a fully defined sequence of 1323 amino acids as given in the specification, under a wash with 0.2 x SSC at 65plusoC. Also disclosed are other pest resistance genes and their protein products. The isolated nucleic acid molecule is used to confer resistance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an isolated nucleic acid molecule comprises RG2B (resistance gene 2B) polynucleotide encoding a polypeptide conferring resistance to plant downy mildew, hybridises to a fully defined sequence of 15062 base pairs as given in the specification, a wash with 0.2 x SSC (standard sodium citrate) at 65plusoC. Also
WO9830083-A1
                                                                                                                                              Resistance gene; pest resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to downy mildew in a plant. This comprises introducing into the plant an expression cassette comprising a promoter operably linked to an RG2B polynucleotide. The present sequence is a lettuce resistance
                                                                                                                                                                                                                                                                 AAW64176 standard; Protein; 1890 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Michelmore RW,
                                      Misc-difference
                                                                Misc-difference
                                                                                                        Lactuca
                                                                                                                                                                                      Lettuce resistance protein RG2A.
                                                                                                                                                                                                                                           AAW64176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein sequence (or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Isolated nucleic acid molecule, RG2B (resistance gene 2B)
polynucleotide, encodes polypeptide useful for conferring resistance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (REGC ) UNIV CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JAN-1997;
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                                                                                                                                 protection;
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DB; ABK67796.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       downy mildew
                                                                                                        sativa
                                                                                                                                                                                                                                                                                                                                                                                       Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                                    QYMREMGIK 39
                                                                                                                                                                                                                                                                                                                                                 QYLRALGLK 9
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                                                                                                                                                                                                              (first entry)
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                                                                Location/Qualifiers 1497
                                        1884
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                                                                                                                                RLG2A; RG2A; lettuce; disc
virus; fungus; protozoon;
transgenic plant.
                           /note-
                                                   note=
                                                                                                                                                                                                                                                                                                                                                                                                   75.0%;
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                          "encoded by TAA"
                                                   "encoded by TAA"
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                                                                                                                                                                                                                                                                                                                                                                                                   Score 33;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    consensus
                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                 DB 23; Le
. 6.5e+02;
. . . . 1;
                                                                                                                                            disease resistance;
con; bacterium; nematode;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence).
                                                                                                                                                                                                                                                                                                                                                                                                                Length 1366;
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RESULT 12
AAU95491
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence represents lettuce RG2A resistance protein, as deduced from the RG2A gene (see AAV44331) isolated from lettuce cultivar Diana genomic DNA. RG (or RLG) families RG1-RG5 and RG7 have been identified, each RG family being defined as a group of polypeptide sequences that have at least 60% amino acid sequence identity. Individual members of an RG family typically map to the same genomic locus. RG nucleic acid sequences (see AAV44188-257) can be used to confer resistance in plants to a variety of pests,
                       Michelmore RW,
                                                                                                09-JAN-1998;
                                                                                                                                                                                                   Plant; lettuce;
                                                                                                                                                                                                                                                   02-JUL-2002
                                                                                                                                                                                                                                                                             AAU95491;
                                                                                                                                                                                                                                                                                                    AAU95491 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  including viruses, fungi, nematodes, insects and bacteria. Sequences from within the RG genes can be used to fingerprint Sequences or germplasm for the presence of desired resistance genes. Antibodies to RG proteins (see AAW64150-98) are useful for detecting the type and amount of RG protein expressed in a plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
                                              (REGC ) UNIV CALIFORNIA
                                                                        10-JAN-1997;
                                                                                                                          26-FEB-2002.
                                                                                                                                                 US6350933-B1.
                                                                                                                                                                          Lactuca sativa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 37; Page 110; 183pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New resistance gene nucleic acids - useful to produce disease resistant plants, e.g. lettuce, Lactuca sativa, and to detect
                                                                                                                                                                                                                         Lettuce pest resistance protein RG2A #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    resistant plants, e.g. resistance genes, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JAN-1998;
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5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1890 AA
                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                       Shen KA,
                                                                       97US-0781734
                                                                                                 98US-0004838
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-US00615
                                                                                                                                                                                                 resistance gene; plant downy mildew;
                                                                                                                                                                                                                                                                                                    Protein; 1890
                                                                                                                                                                                                                                                                                                                                                                  39
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                                                                                                                                                                                                                                                                                                                                                                                                                             75.0%;
55.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      to fingerprint cultivars
                        Meyers BC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shen
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 33;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                  ω
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                                                                                                                                                                                                                                                                                                                                                                                                                             9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 19;
                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1890;
                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                   RG;
                                                                                                                                                                                                   transgenic.
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RESULT 13
ABB66978
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  encoding a polypeptide conferring resistance to plant downy mildew and hybridises to a fully defined sequence of 1323 amino acids as given in the specification, under a wash with 0.2 x SSC at 65plusoC. Also disclosed are other pest resistance genes and their protein products. The isolated nucleic acid molecule is used to confer resistance to downy mildew in a plant. This comprises introducing into the plant an expression cassette comprising a promoter operably linked to an RGZB polynucleotide. The present sequence is a lettuce resistance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated nucleic acid molecule comprises an RG2B (resistance gene 2B) polynucleotide encoding a polypeptide conferring resistance to plant downy mildew, hybridises to a fully defined sequence of 15062 base pairs as given in the specification, under a wash with 0.2 x SSC (standard sodium citrate) at 65plusoC. Also included is a transgente plant comprising a heterologous expression cassette containing a promoter operably linked to an RG2B polynucleotide
                                                                                                 WPI;
                                                                                                                                                                                                                                                                                       Drosophila melanogaster.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Isolated nucleic acid molecule, RG2B (resistance gene 2B) polynucleotide, encodes polypeptide useful for conferring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; ABK67843
                                              New isolated nucleic acid genes from Drosophila and
                                                                                                                          Venter
                                                                                                                                                                           23-MAR-2000;
11-JUL-2000;
                                                                                                                                                                                                                23-MAR-2001;
                                                                                                                                                                                                                                         27-SEP-2001
                                                                                                                                                                                                                                                                 WO200171042-A2
                                                                                                                                                                                                                                                                                                                   pharmaceutical.
                                                                                                                                                                                                                                                                                                                                Drosophila;
                                                                                                                                                                                                                                                                                                                                                       Drosophila melanogaster polypeptide SEQ
                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                          ABB66978;
                                                                                                                                                                                                                                                                                                                                                                                                                               ABB66978 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                 (PEKE )
                                                                                                 2001-656860/75
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                                                                                                                                                                                                                                                                                                                               developmental
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2000US-0614150.
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55.6%;
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                                              detection reagent for for elucidating cell s
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9e+02;
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                                              r detecting
signalling
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Disclosure;

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27726;

21pp

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Sequence

Listing;

Query Match Best Local Similarity

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Score Pred.

32;

DB 22; 2e+02;

Length 281;

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RESULT 14
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ID AAG70
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The inventiuseful in developmental biology and in elucidating cell signalling a cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
                                                                                                                                                       leading to programmed disorders, yeast and f certain diseases -
                                   The present invention provides the protein and coding sequences of a number of apoptosis associated proteins from the yeast Saccharomyces cerevisiae and the fungus Candida albicans. These can be used to identitreatments for fungal and yeast infections, for proliferative diseases and for apoptosis related diseases such as autoimmune diseases, ischaer and neurodegeneration. The present sequence is one of the C. albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C albicans apoptosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence data for this patent did not form specification, but was obtained in electronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-ABB72072).
                                                                                                                                Claim 24; Fig 2; 218pp; English.
                                                                                                                                                                                                                          N-PSDB;
                                                                                                                                                                                                                                                                             Contreras RH,
                                                                                                                                                                                                                                                                                                                               01-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                         03-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                    11-JAN-2001.
                                                                                                                                                                                                                                                                                                                                                                                                             WO200102550-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                      Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yeast; fungus; apoptosis; infection; proliferative disease; vaccine; autoimmune disease; ischaemia; neurodegeneration.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAG70876;
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Sequence
                         proteins
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                                                                                                                                                                                                                                                                BJM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QYCRSLGLQ
                                                                                                                                                                                fungal nucleic acids encoding proteins involved in a pathway programmed cell death, useful for treating proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194 AA;
 281
                           the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                       PHARM
                           invention
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66.7%;
                                                                                                                                                                      fungal infections,
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                                                                                                                                                                                                                                                                           Luyten WHML,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 194
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                                                                                                                                                                     apoptosis
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RESULT 15
AAU35870
                                                                              The invention relates to antisense inhibitors of genes essential to CC prokaryotic cellular proliferation, their use in identifying the CC genes, their use in the discovery of novel antibiotics, the essential CC genes themselves and the encoded proteins. The prokaryotes used are CC pneumoniae, Pseudomonas aeruginosa and Enterococcus faecalis. The CC invention is also useful for the identification of potential new targets CC for antibiotic development. The antisense nucleic acids can also be used CC to identify proteins used in proliferation, to express these proteins. CC and to obtain antibodies capable of binding to the expressed proteins. CC The proteins can be used to screen compounds in rational drug discovery CC programmes. The antisense nucleic acid sequence is also useful to screen CC programmes. The antisense nucleic acid sequence for homologous nucleic acids which are required for cell proliferation in CC essential prokaryotic cellular proliferation protein.

CC Note: The sequence data for this patent did not form part CC format directly from WIPO at
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                                            Sequence
                                                                                                                                                                                                                                                                                                                                                      Example 3; Seq ID No 11463; 511pp; English.
                                                                                                                                                                                                                                                                                                                                                                                   New polynucleotides for the identification and development antibiotics, comprise sequences of antisense nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-611495/70.
N-PSDB; AAS53729.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haselbeck R,
Yamamoto RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-MAR-2000;
23-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense; prokaryotic ceilular proliferation protein; antibiotic; antibacterial; drug design.
                                                                     ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAY-2000;
23-OCT-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Helicobacter pylori cellular proliferation protein #183
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAU35870 standard; Protein; 327 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ELIT-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6;
                                            327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-191078P.
2000US-206848P.
2000US-207727P.
2000US-242578P.
2000US-253625P.
2000US-257931P.
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Xu HH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-269308P
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 72.78;
66.78;
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 Score
Pred.
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 32;
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DB 22;
2.4e+02;
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             Length 327;
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Matches 6; Conservative 2; Mismatches 1; Indels

Qy 1 QYLRALGLK 9
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Db 313 EYLNALGLQ 321
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Search completed: July 11, 2003, 11:54:21 Job time: 6.16424 secs



Minimum Maximum Result Database Scoring table: Title: Perfect score: OM protein - protein search, using sw model Post-processing: Minimum Match 0% Total number of hits satisfying chosen parameters: Searched: Sequence: õ 9 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. DB seq Score Issued_Patents_AA:*

1: /cgn2_6/ptodata/1,

2: /cgn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_6/ptodata/1, length: 0 length: 2000000000 US-10-091-442-5 44 1 QYLRALGLK 9 July 11, 2003, 11:49:36; Search time 1.60915 Seconds (without alignments) 164.563 Million cell updates/sec 262574 seqs, 29422922 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 100.0 Match 1100.0 100.0 Maximum Match 100% Listing first 45 summaries GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compus /cgn2_6/ptodata/1/laa/5A_COMB.pep:*
/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:* /cgn2_6/ptodata/1/iaa/backfiles1.pep:* Length DB 250 1366 1890 387 387 387 387 387 623 623 623 623 803 2548 310 327 347 387 US-08-611-977-5
US-08-472-659-34
US-08-474-661-3
US-08-474-661-5
US-08-472-659-5
US-09-167-717-2
US-09-167-717-2
US-09-167-718A-2
US-09-570-778A-2
US-09-570-778A-9
US-09-570-778A-9
US-09-347-801-18
US-09-347-801-18
US-09-347-801-18
US-09-347-801-18
US-09-162-368-2
US-09-172-422-1
US-08-062-368-3
US-08-966-410-3
US-08-968-563-37
US-08-968-563-37
US-08-968-563-37
US-09-570-778A-11 SUMMARIES Compugen · Ltd Description Sequence 5, Appli 5, Appli 2, Appli 22, Appl 22, Appl 4,4,7,0,0 Appli 4, Appl 4, Appl 4, Appl Appli Appli Appli Appli Appli Appli Appli

45	44	43	42	41	40	39	38	37	36	35	34	ω G	32	31 1	30	29	28
29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30
65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	68.2	68.2	68.2	68.2
446	441	372	372	349	315	315	223	223	214	10	10	10	10	1327	533	512	393
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US-08-833-610-2	US-09-297-937C-11	US-09-280-590A-16	US-08-928-941D-16	US-07-857-224B-95	US-09-227-613-16	US-09-439-261-15	US-09-280-590A-22	US-08-928-941D-22	US-09-228-986-129	PCT-US95-11235-60	PCT-US94-01258-60	US-08-931-645-60	US-08-300-386A-60	US-09-196-387-2	US-09-360-197-10	US-09-134-078-26	US-09-134-001C-5594
Sequence 2, Appli	Sequence 11, Appl	Sequence 16, Appl.	Sequence 16, Appl	Sequence 95, Appl	Sequence 16, Appl	•	-	Sequence 22, Appl	۳	Sequence 60, Appl	•	Sequence 60, Appl	Sequence 60, Appl	Sequence 2, Appli	Sequence 10, Appl	Sequence 26, Appl	Sequence 5594, Ap

ALIGNMENTS

US-08-611-977-5 Patent No. 5972886
GENERAL INFORMATION: Sequence PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
ETLING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-067339
ETLING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION: TELEFAX: (703) 836-20 INFORMATION FOR SEQ ID NO: CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Qoane, STREET: P.O. Box 1404
CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404 REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620 COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN RELEASE #1.0, V
CURRENT APPLICATION DATA: ease
APPLICATION NUMBER: US/08/611,977
FILING DATE: 06-MAR-1996
CLASSIFICATION: 435 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993 APPLICANT: MIURA, Kenju
APPLICANT: ISHIDA, NO. 5972886uhiro
APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. 5972886omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34 SEQUENCE CHARACTERISTICS: APPLICANT: APPLICANT: APPLICANT: NAME: McGowan, Malcolm Application US/08611977 E: Burns, Qoane, Swecker & Mathis P.O. Box 1404 TSUROUOKA, NO. 5972886uo NAKAZATO, Hiroshi IWASA, Fuyu TSUJIMOTO, 3) 60. 836-2021 NO: 5: Masafumi <u>.</u> Version #1.30

Sequence Sequence Sequence Sequence Sequence Sequence

37, Appl 37, Appl 38, Appl 410, App

Sequence Sequence Sequence Sequence

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2, Appli
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4, Appli
4, Appli
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MOLECULE TYPE: peptide

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TYPE: amino acid STRANDEDNESS: sir TOPOLOGY: linear

single

9 amino acids

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Best Local (
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                                                                                                                                                                                                                             CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
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                                                                                 INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                  SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Rele
CURRENT APPLICATION DATA:
                                                                                                                               TELECOMMUNICATION INFORMATION:
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                                                                                                                                                  REGISTRATION NUMBER: 39,300 REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
                 TOPOLOGY:
                                                                                                                 TELEPHONE:
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                              amino acid
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P.O. Box 1404
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YAMAICHI, KOZO
YAMAGUCHI, KO. 5831030cmi
ENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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TSUROUOKA, No. 58:
NAKAZATO, Hiroshi
                                                                                                (703) 836-2021
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                                                                                                                 (703) 836-6620
protein
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14-JUL-1993
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Pred. No.
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US-08-474-661-34
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                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/091,0:
FILING DATE: 14-UUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-UUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
APPLICATION NUMBER: JP 5-067339
                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION DATA:
PRIOR APPLICATION UNBER: US 08/091,028
                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
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CORRESPONDENCE ADDRESS:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Polonia
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289 QYLRALGLK 297
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                              1 QYLRALGLK 9
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                                                                          Similarity
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                                                            Conservative
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YAMAICHI, KOZO
YAMAGÜCHI, NO. 5874253omi
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                                                                                                                                                        linear
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                                                          Score 44; DB 2;
Pred. No. 0.079;
; Mismatches (
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                                                                                       Length 380;
                                                            Indels
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Query Match

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APPLICANT:

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                                  Sequence 5, Application US/08472659
Patent No. 5831030
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
APPLICANT:
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TITLE OF IN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                       LENGTH: 380 amino acids
TYPE: amino acid
TOPOLOGY: linear
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CITY: Alexandria
STATE: Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: MCGOWAN, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
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289 QYLRALGLK 297
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YAMAICHI, KOZO
YAMAGUCHI, NO. 5972886omi
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SYSTEM: PC-DOS/MS-DOS
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h 100.0%; Score 44; DB 2; Length 380; Similarity 100.0%; Préd. No. 0.079; 9; Conservative 0; Mismatches 0; Indels
TSUJIMOTO, Masafumi
IWASA, Fuyuki
TSUROUOKA, No. 5831030uo
NAKAZATO, Hiroshi
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INVENTION:

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US-08-474-661-5
                                                                                            GENERAL INFORMATION:
APPLICANT: TSUJIMO'
APPLICANT: IWASA, I
APPLICANT: TSURUOK
APPLICANT: NAKAZAT'
APPLICANT: MIURA, I
APPLICANT: ISHIDA,
                                                                                                                                                                                                                            Sequence 5, Application US/08474661 Patent No. 5874253
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER: JP 4-212305
EILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
EILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
APPLICATION NUMBER: US 08/091,028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION .NUMBER: US/08/472,659
FILING DATE: 07-JUN-1995
CLASSIFICATION: 536
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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APPLICANT:
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ATTORNEY/AGENT INFORMATION:
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                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide
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APPLICANT: YAMAGUCHI, NO. 5831030omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                          Match 88.6%; Score 39; DB 2; L
Local Similarity 100.0%; Pred. No. 1.9e+05;
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|YLRALGLK 9
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KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. 5874253omi
VENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
EQUENCES: 34
                                                                                                                 MIURA, Kenju
                                                                                                                                   TSURUCKA, NO. 5874253uo
NAKAZATO, Hiroshi
                                                                                                                                                                     IWASA, Fuyu
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                                                                                                  ISHIDA, No.
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                                                               ; ORGANISM: Citrobacter amalonaticus
US-09-167-717-2
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   Best Local Similarity 77.8 Matches 7; Conservative
                                 Query Match
                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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Best Local :
                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/167,717
CURRENT FILING DATE: 1998.10-07
EARLIER APPLICATION NUMBER: JP 276261/1997
EARLIER FILING DATE: 1997-10-08
                                                                                           LENGTH: 250
TYPE: PRT
                                                                                                                                                                                                                APPLICANT: KOMATSUZAKI, SATOMI
TITLE OF INVENTION: MALEATE ISOMERASE GENE
FILE REFERENCE: PH-555US
                                                                                                                                                                                                                                                               APPLICANT: YASUDA, SHINZO
                                                                                                                                    NUMBER OF
                                                                                                                                                                                                                                                                          APPLICANT: MUKOUYAMA,
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                                                                                                                                                                                                                                                                                                           tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
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MEDIUM TYPE: Floppy disk
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FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
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Doane, Swecker & Mathis

Taschington &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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5. 6133014
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8; Conserv
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Score 33; DB 4; Length 250; Pred. No. 13; Indels
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US-09-004-838-88
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                RESULT 9
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US-09-004-838-22
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                   FEATURE:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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                                                                                                                      Local Similarity nes 5; Conserv
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LOCATION:
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                                                                                                                                                                                                                                                                                TOPOLOGY:
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REFERENCE/DOCKET NUMBER: 023070-078810US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
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                                                                                          · 1 QYLRALGLK 9
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31 QYMREMGIK 39
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                                                                                                                                                                                                                                                                                                               amino acid
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                                                                                                                         Conservative
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55.6%;
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                                                                                                                                      Score 33;
Pred. No.
                                                                                                                                        DB 4;
86;
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Sequence 88, Patent No. 6

8, Application US/09004838 6350933

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GENERAL INFORMATION:

APPLICANT:

APPLICANT:

Shen, Kathy Meyers, Blake

Michelmore, Richard W.

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CURRENT APPLICATION NUMBER: US/09/314,847A
CURRENT FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 4
SEQ ID NO 4
LENGTH: 387
TYPE: PRT
ORGANISM: E. blatte
US-09-314-847A-4
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Best Local :
Ouery Match
Best Local Similarity
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APPLICANT: Liu, Amy D.
APPLICANT: Selitonova, Olga V.
TITLE OF INVENTION: Directed Evolution of Microorganisms
                                                                                                                                                                                                                 FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (415) 576-030 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 09-JAN-1998
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/781,734
FILING DATE: 10-JAN-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Elnhorn, Gregory P.
REGISTRATION NUMBER: 38,440
REFERENCE/DOCKET NUMBER: 02:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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nes 5; Conserv
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OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: 11
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Two Embarcadero Center, Eighth Floor
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 Score 31;
Pred. No.
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Pred. No. 1.2e+02;
3; Mismatches 1
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 DB
57;
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                Length 387,
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RESULT 13
US-09-570-778A-8
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TYPE: PRT
: ORGANISM: Escherichia blattae
US-09-570-778A-7
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; TYPE: PRT
; ORGANISM: Escherichia blattae
US-09-570-778A-2
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US-09-570-778A-2
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US-09-570-778A-7
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Matches 6
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SOFTWARE: FastSEQ for
SEQ ID NO 7
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APPLICANT: Whited, Gregory M.
APPLICANT: Selifonova, Olga V.
TITLE OF INVENTION: Mutant 1,3-propanediol Dehydrogenase
FILE REFERENCE: GC580-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Trimbur, Donald E. APPLICANT: Whited, Gregory M. APPLICANT: Selifonova, Olga V. TITLE OF INVENTION: Mutant 1,3-Propanediol Dehydrogenase FILE REFERENCE: GC580-2
                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 60/134,868 PRIOR FILING DATE: 1999-05-19
                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/570,778A CURRENT FILING DATE: 2000-05-14
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                                                             342 QHLRELGVK 350
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Sequence 8, Application US/09570778A Patent No. 6468773

GENERAL INFORMATION:

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APPLICANT: Trimbur, Donald E.
APPLICANT: Whited, Gregory M.
APPLICANT: Whited, Gregory M.
APPLICANT: Selifonova, Olga V.
TITLE OF INVENTION: Mutant 1,3-Propanediol Dehydrogenase
FILE REFERENCE: GC580-2
CURRENT APPLICATION NUMBER: US/09/570,778A
CURRENT FILING DATE: 2000-05-14
PRIOR APPLICATION NUMBER: US 60/134,868
PRIOR FILING DATE: 1999-05-19
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
LENGTH: 387
TYPE: PRT
ORGANISM: Escherichia blattae
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; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 387
; TYPE: PRT
; ORGANISM: Escherichia blattae
US-09-570-778A-8
         APPLICANT: Allen, Steve
APPLICANT: Lee, Jian Ming
TITLE OF INVENTION: Plant Protein Kinases
FILE REFERENCE: BB-1171
CURRENT APPLICATION NUMBER: US/09/347,801
CURRENT FILING DATE: 1999-07-02
EARLIER APPLICATION NUMBER: 60/092,438
EARLIER FILING DATE: July 10, 1998
NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                           RESULT 15
US-09-347-801-4
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                               Sequence 4, Application US/09347801 Patent No. 6262345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Selifonova, Olga V.

TITLE OF INVENTION: Mutant 1,3-Propanediol Dehydrogenase
FILE REFERENCE: GC580-2
CURRENT APPLICATION NUMBER: US/09/570,778A
CURRENT FILING DATE: 2000-05-14
PRIOR APPLICATION NUMBER: US 60/134,868
PRIOR APPLICATION NUMBER: US 60/134,868
PRIOR FILING DATE: 1999-05-19
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SOFTWARE: Microsoft Office 97
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Local Similarity 66.7%;
nes 6; Conservative
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| 342 QHLRELGVK 350
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Search completed: July 11, 2003, 12:02:08 Job time: $2.60915\ \text{secs}$

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Result
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Listing first 45 summaries
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Perfect score:
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length: 2000000000
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US-10-023-282-1116

US-10-037-677-4

US-09-991-138-7

US-09-991-138-8

US-09-991-138-9

US-09-991-138-9

US-09-991-138-9

US-09-991-138-9

US-09-991-138-9

US-09-991-138-9

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US-10-083-357-1310
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Sequence 34, Appl
Sequence 53, Appl
Sequence 1310, Ap
Sequence 1163, A
Sequence 1165, A
Sequence 1165, A
Sequence 12104, A
Sequence 2, Appli
Sequence 2, Appli
Sequence 8, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 3, Appli
Sequence 3184, Ap
Sequence 3188, Ap
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US-10-091-442-5
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10									10	9	9					10	9	9			9	10		10	10
US-09-815-242-5446	·513A-	US-09-892-398-22	US-09-864-636A-164	5	76	01-464	738	156-761-	US-09-841-835-2	-115/	156-761-	US-10-156-761-11435	-764-853	US-10-093-037-26	US-10-121-032-26	-815	US-09-991-138-11	US-09-991-138-10	30	US-10-147-874-2	US-09-895-913A-134	US-09-851-682A-1	US-10-156-761-14694	US-09-854-731-18	US-09-854-731-4
e 544	16,	22, 1	164,	129,	e 117	Sequence 553, App	N	1247	e 2, App	Sequence 8, Appli	Sequence 14161, A	Sequence 11435, A	e 641	26,	Sequence 26, Appl	Sequence 11349, A	11	10	Sequence 37, Appl	Sequence 2, Appli	134,	e 1, A	Sequence 14694, A	Sequence 18, Appl	Sequence 4, Appli

ALIGNMENTS

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Sequence 5, Application US/10091442

Patent NO. US20020164711A1

GENERAL INFORMATION:

INASA, Fuyuki
TSUROVOKA, NO. US20020164711A1uhiro
NAKAZATO, Hiroshi
NUTKA, Kenju
ISHIDA, NO. US20020164711A1uhiro
NAKAZATO, Hiroshi
NUTKA, Kenju
ISHIDA, NO. US20020164711A1uhiro
NAKAZATO, Hiroshi
ITITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34

CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker & Mathis
STREET: P.O. Box 1404

CITY: Alexandria
STATE: Virginia
COUNTRY: Unitted States
ZIP: 22313-1404

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/10/091,442
FILING DATE: 08-MG-1998
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-MG-1998
APPLICATION NUMBER: US 08/091,028
FILING DATE: 17-JUI-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 11-JUI-1993
APPLICATION NUMBER: US 08/091,038
APPLICATION NUMBER: JS 05/091,038
APPLICATION NUMBER: JS 06/091,038
APPLICATION NUMBER: JS 06/091,038
APPLICATION NUMBER: JS 06/091,038
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Best Local
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                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
ADDITICATION DATA:
ADDITICATION DATA:
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                                                              APPLICATION NUMBER: JP 4 FILING DATE: 17-JUL-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 3: CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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ATTORNEY/AGENT INFORMATION: NAME: McGowan, Malcolm K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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                               APPLICATION NUMBER: JP 6 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 08-AUC
                                                                                                                                                                                                                                                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: P.O. Box CITY: Alexandria
                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS
                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                    RY: United States 22313-1404
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REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 001560-247
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Burns, Doane, Swecker & Mathis P.O. Box 1404
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YAMAGUCHI, NO. US20010026931A1omi
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                                                                                                JP 4-212305
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                                                JP 6-067339
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Pred. No. 4e+05;
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Best Local
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TELECOMMUNICATION INFORMATION:
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STRANDEDNESS: sir
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               TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002.
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                        FILING DATE: 04-MAR-19 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
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TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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                                NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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TELEPHONE:
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STATE: Virginia
                                                                                                                                              APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/474,661 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: P.O. Box 1404
                                                                                                                                                                                 APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
                                                                                                                             APPLICATION NUMBER: JP 6-067339
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llarity 100.0%;
Conservative 0
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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(703)
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Pred. No. 4e+05;
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               TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                              REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                            APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: YAMAGUCHI, NO. USZUULUUZOYJIALUIIII
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
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                                                                                                                                            FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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                                                              TELEPHONE:
                                                                                                                                                                                APPLICATION NUMBER: JP 6-067339
                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version #1.30
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Y: United States
                                                                                                                                McGowan, Malcolm K.
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380 amino acids
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P.O. Box 1404
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YAMAICHI, KOZO
YAMAGUCHI, NO. US:
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ISHIDA, No. US20010026931Aluhiro
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TSUROUOKA, No. US20010026931A1uo
NAKAZATO, Hiroshi
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ilarity 100.0%;
Conservative 0;
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                                                                  (703) 836-6620
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Pred. No.
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US-09-847-208-53
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                                                                                                                         ; ORGANISM: Saccharomyces cerevisiae US-10-083-357-1310
                                                                                                                                                                                                                                                                                                                                                   US-10-083-357-1310
                                                                                                                                                                                                                    Sequence 1310, Application US/10083357
Publication No. US20030054370A1
GENERAL INFORMATION:
APPLICANT: Qiandong Zeng et al.
TITLE OF INVENTION: Systemic Discovery of New Genes
FILE REFERENCE: 032796-090
CURRENT APPLICATION NUMBER: US/10/083,357
CURRENT FILING DATE: 2002-02-27
                                                                                                                                                                    NUMBER OF SEQ ID NOS: 1346
SEQ ID NO 1310
LENGTH: 1465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 177
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 53
LENGTH: 350
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                                                                           Query Match
Best Local :
                                                              Matches
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CURRENT FILING DATE: 2001-05-01
NUMBER OF SEQ ID NOS: 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: FUSION MOLECULES AND TREATMENT OF TITLE OF INVENTION: IGE-MEDIATED ALLERGIC DISEASES FILE REFERENCE: UC67.002A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Saxon, Andrew APPLICANT: Zhang, Ke
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                                                                                                                                                          TYPE: PRT
                                                            Local Similarity
nes 6; Conserv
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1094 QYLNGIGLK 1102
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                            1 QYLRALGLK 9
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66.7%;
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                                                            Score 33; DB 9;
Pred. No. 4.6e+02;
1; Mismatches 2
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Pred. No.
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RESULT 7 US-09-815-242-11463 Sequence 11463, Application US/09815242 ; Patent No. US20020061569A1

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US-09-815-242-11625
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                                PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR PPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
                                                                                                                                                     TITLE OF INVENTION: Identification of Essential Genes TITLE OF INVENTION: Prokaryotes FILE REFERENCE: ELITER, Olla CURRENT APPLICATION NUMBER: US/09/815,242 CURRENT FILING DATE: 2001-03-21 PRIOR APPLICATION NUMBER: 66/191,078 PRIOR FILING DATE: 2000-03-21
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PRIOR APPLICATION NUMBER: 60/253,625
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CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/242,578
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Local Similarity 66.7%;
es 6; Conservation
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Trawick, John D.
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Zyskind, Judith W.
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NUMBER: 60/253,625
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Pred. No.
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Best Local Similarity
Thes 6; Conserve
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Best Local Similarity
Thes 6; Conserve
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SEQ ID NO 11625
LENGTH: 327
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TITLE OF INVENTION: Identification of Essential Genes

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITER.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21
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PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
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                                                                                                                                                                                     LENGTH:
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188 QYARAMGL 195
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b. US20020061569A1
                            1 QYLRALGL 8
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                                                               Conservative
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                                                                               72.7%;
75.0%;
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66.7%;
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                                                                               Score 32;
Pred. No.
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Pred. No.
                                                                 Mismatches
                                                                                DB 10;
1.6e+02;
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RESULT 10 US-10-023-282-1116 ; Sequence 1116, Application US/10023282

US20030092893A1

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EARLIER APPLICATION NUMBER: 09/205,258
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                                           FILING DATE:
                                                                          APPLICATION
                                                                                                                                 APPLICATION NUMBER: 60/048,875 FILING DATE: 1997-06-06 APPLICATION NUMBER: 60/049,374
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                                                                                                                      FILING DATE:
                                                                                                                                                                                             APPLICATION NUMBER: 60/049,373
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                                                                                                        APPLICATION
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               NUMBER: 60/048,883
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US-10-023-282-1116
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SEQ ID NO 1116
LENGTH: 292
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FILING DATE: 1998-07-15
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FILING DATE: 1997-06-06
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FILING DATE: 1997-06-06
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FILING DATE: 1997-06-06
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US-10-037-677-4
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APPLICANT: Schellenberger, Volker
APPLICANT: Liu, Amy D.
APPLICANT: Selifonova, Olga V.
TITLE OF INVENTION: Directed Evolution of Microorganisms
                                                                                                                                                                                                                                                                     SEQ ID NO 2
LENGTH: 387
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PRIOR FILING DATE: 2000-05-14
PRIOR APPLICATION NUMBER: US 60/134,868
PRIOR FILING DATE: 1999-05-19
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FACCOR
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LENGTH: 3
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Best Local :
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CURRENT FILING DATE: 2001-10-23
PRIOR APPLICATION NUMBER: 09/314,847
PRIOR FILING DATE: 1999-05-19
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 3.0
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CURRENT FILING DATE: 2001-11-16
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ORGANISM: Escherichia blattae
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Local Similarity 66.7%;
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Pred. No. 2.8e+02;
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Pred. No. 2.8e+02;
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US-09-991-138-9
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                                                        Sequence 9, Application US/09991138 Publication No. US20030040091A1 GENERAL INFORMATION:
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Best Local Similarity 66.
Matches 6; Conservative
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CURRENT FILING DATE: 2001-11-16
PRIOR APPLICATION NUMBER: US 09/570,778
PRIOR FILING DATE: 2000-05-14
PRIOR APPLICATION NUMBER: US 60/134,868
PRIOR FILING DATE: 1999-05-19
NUMBER OF SEQ ID NOS: 12
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APPLICANT: Whited, Gregory M.
APPLICANT: Selifonova, Olga V.
TITLE OF INVENTION: Mutant 1,3-Propanediol Dehydrogenase
FILE REFERENCE: GC580-2D1
APPLICANT: Trimbur, Donald E. APPLICANT: Whited, Gregory M. APPLICANT: Selifonova, Olga V.
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APPLICANT: Whited, Gregory M.
APPLICANT: Selifonova, Olga V.
TITLE OF INVENTION: Mutant 1,3-propanediol Dehydrogenase
FILE REFERENCE: GC580-2D1
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TYPE: PRT
ORGANISM: Escherichia blattae
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Pred. No. 2.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 31; I
Pred. No. 2
                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
```

Length 387;

0,

Gaps

0

8e+02;

Length 387; Indels

0,

Gaps

0;

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FILE REFERENCE: GC580-2D1
CURRENT APPLICATION NUMBER: US/09/991,138
CURRENT FILING DATE: 2001-11-16
PRIOR APPLICATION NUMBER: US 09/570,778
PRIOR APPLICATION NUMBER: US 60/134.868
PRIOR APPLICATION NUMBER: US 60/134.868
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
LENGTH: 387
TYPE: PRT
ORGANISM: Escherichia blattae
US-09-991-138-9

Query Match
Best Local Similarity 66.7%; Pred. NO. 2.8e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps
Qy 1 QYLRALGLK 9
1:11 | 1; 1
Db 342 QHLRELGVK 350

Search completed: July 11, 2003, 12:37:33
Job time: 2.63825 secs
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Result
No.
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Maximum DB
                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run
                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                        seq length: 0 seq length: 2000000000
   US-10-091-442-5
44
1 QYLRALGLK 9
                                                                                                                                                                                                                            Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              July 11, 2003, 11:45:06; Search time 1.81497 Seconds (without alignments) 476.708 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                              283224 seqs, 96134422 residues
                                                                                                                                                                                                                                                                                                                             PIR_73:*
 GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                                                                                                                                               pir1: *
pir2: *
pir3: *
pir4: *
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  DB
                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                283224
                      resistance protein
TyB protein - yeas
TyB protein - yeas
TyB protein - yeas
TyB protein - yeas
TyB protein - wous
hypothetical prote
calpastatin - mous
hypothetical prote
ABC transporter, A
ABC transporter, A
ABC transporter, A
ABC dehydrogen
hypothetical prote
conserved hypothetical prote
conserved hypothet
                                                                                                                                                                                            multidrug-efflux t glutaredoxin - The
probable exported N-acetylglucosamin hypothetical prote
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probable PE protei
                                                                                                                                                                         conserved hypothet
                                                                                                                                                                                 alcohol dehydrogen
                                                                                                                                                                                                                             Description
                                                                                                                                                                                        probable deoxyribo
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ALIGNMENTS

Query Match

79.5%;

Score 35;

DB 2;

Length 164;

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A; Gene: TM1031
C; Superfamily: Clostridium
C; Keywords: electron transf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      glutaredoxin - Thermotoga maritima (strain MSB8)
c;Species: Thermotoga maritima
c;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 21-Ju1-2000
C;Accession: F72303
R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, R;Nelson, R;Nelson
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                                                                                                                                                                                                                                          A;Cross-references: GB:AE001764; GB:AE000512; A;Experimental source: strain MSB8
                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-80 < ARN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Title: Evidence for lateral gene transfer between Archaea and Bacteria from A; Reference number: A72200; MUID:99287316; PMID:10360571
                                                                                                                                                                                                                                                                                                                                                                                                           A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: F72303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nature 399,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Garrett, M.M.; Stewart, A.M.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 F72303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Cross-references:
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A; Residues: 1-270 < KUN>
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C; Date: 05-Dec-1997 #sequence_revision
C; Accession: B69781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Experimental source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Status: preliminary; nucleic acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 multidrug-efflux transporter regulator homolog ydfL - Bacillus subtilis
        Query Match
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7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79.5%;
87.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gill, S.R.; Gwinn, M.L.; I
Cotton, M.D.; Pratt, M.S.;
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1; Mismatches
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                                                                                                                       probable glutaredoxin
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₽B
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                                                                                                                                                                                                                                                                       NID:g4981561; PIDN:AAD36108.1;
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Length 80
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; Phillips, C.A.; Ri
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                                                                                                                                                                                                                                                                           PID:g49815
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son, D.;
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A:Cross-references: EMBL:X81694; NID:g608689; PIDN:CAA57342.1; PID:g608690 A:Note: only a part of the coding sequence is given R:Shen, H.D.; Choo, K.B.; Lee, H.H.; Hsieh, J.C.; Lin, W.L.; Lee, W.R.; Har Clin. Exp. Allergy 21, 675-681, 1991
A:Title: The 40-kilodalton allergen of Candida albicans is an alcohol dehy: A:Reference number: A61504; MUID:92136159; PMID:1777830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
S52153
                                                  C;Superfamily: alcohol dehydrogenase; long-chain alcohol dehydrogenase homology C;Keywords: alcohol metabolism; NAD; oxidoreductase; zinc C;Keywords: alcohol metabolism; NAD; oxidoreductase; bomology <LADH> F;31-338/Domain: long-chain alcohol dehydrogenase homology <LADH> F;46,69,156/Binding site: zinc, catalytic (Cys, His, Cys) #status predicted
                                                                                                                                                                                                           A;Molecule type: mRNA
A;Residues: 104-139,'T',141-226,'A',228-312,'S' <SHE>
A;Cross-references: GB:X81694; NID:g608689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Title: Structure and regulation of the Candida albicans ADH1 A;Reference number: S63781; MUID:96287648; PMID:8686375 A;Accession: S63781
                                                                                                                                               A; Gene: ADH1
                                                                                                                                                                     C; Genetics
                                                                                                                                                                                             A; Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-350 <BE2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Bertram, G.; Swoboda, R.K.; Gooday, G.W.; Gow, N.A.R.; Brown, Yeast 12, 115-127, 1996
                                                                                                                                                                                                                                                                                      A; Accession: A61504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 08-Dec-2000
C;Accession: S63781; A61504; S52153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N;Alternate names: 40K allergen C;Species: Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Note: Intron positions not resolved (incomplete sequence) C;Superfamily: deoxyribodipyrimidine photo-lyase C;Keywords: carbon-carbon lyase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         probable deoxyribodipyrimidine photo-lyase (EC 4.1.99.3) - tomato (fragment) N;Alternate names: cryptochrome 2; DNA photolyase; photoreactivating enzyme C;Species: Lycopersicon esculentum (tomato) C;Date: 23-Apr_1999 #sequence_revision 23-Apr-1999 #text_change 20-Jun-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            alcohol dehydrogenase (EC 1.1.1.1)
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C;Genetics:
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A;Description: The evolution of cryptochrome ge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R; Kolukisaoglu, U.; Schneider-Poetsch, H.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Accession: T06581
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Reference number: Z15773
A; Accession: T06581
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Matches
                                                                                                                                                                                      sequence extracted from NCBI backbone (NCBIN:80403, NCBIP:80409;
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                                               site: zinc,
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C;Species: Deinococcus radiodurans
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 17-Mar-2000
C;Accession: C7557
R;Mhite, O; Elsen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A;Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans FA;Reference number: A75250; MUID:20036896; PMID:10567266
A;Accession: C7557
                                                                                                                                                                                                                                                                                                                                              hypothetical protein MJ1491 - Methanococcus jannaschii C;Species: Methanococcus jannaschii C;Species: Methanococcus jannaschii C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000 C;Accession: B64486

R;Bult, C.J.; White, O.; Olsen, G.J.; Zhou, L.; Fleischmann, R.D.; Sutton, G.G.; Blak R;Bult, C.J.; White, O.; Olsen, G.J.; Zhou, L.; Fleischmann, R.D.; Sutton, G.G.; Blak R;Bult, C.J.; White, O.; Olsen, G.J.; Zhou, L.; Fleischmann, R.D.; Sutton, G.G.; Blak R;Bult, C.J.; White, O.; Olsen, G.J.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, J.D.; Sadow, P.W.; Hanna, M.C.; Cotton, M.D.; Roberts, K.M.; Hurst, M.A. Science 273, 1058-1073, 1996
Science 273, 1058-1073, 1996
A;Authors: Kaine, B.P.; Borodovsky, M.; Klenk, H.P.; Fraser, C.M.; Smith, H.O.; Woese A;Title: Complete genome sequence of the methanogenic archaeon, Methanococcus jannasc A;Reference number: A64300; MUID:96337999; PMID:8688087
A;Accession: B64486
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C75537
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                                                                                                                                                                                         A:Map position: FOR1465677-1466060
A:Start codon: GTG
C:Superfamily: Methanococcus janna
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A; Cross-references: GB:U67590; GB:L77117;
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A; Residues: 1-127 <B
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Best Local S
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                                        YLSALGLK 90
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                                                                                                                                                                                             Methanococcus jannaschii hypothetical
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llarity 100.0%;
Conservative
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                                                                                                                                  Score 33;
Pred. No.
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Pred. No.
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                                                                                                                                                                                             RESULT 10
T08421
                                                                                          resistance protein homolog RGC2a - garden lettuce N;Alternate names: resistance protein candidate C;Species: Lactuca sativa (garden lettuce) C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 C;Accession: T08421
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                R;Shen, K.A.; Meyers, B.C.; Faridi, submitted to the EMBL Data Library, A;Reference number: Z16412
A;Accession: T08421
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C; Superfamily:
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A; Residues: 1-412 < PAR>
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6; Conser
                                                                                                                                                                                                                                                                                                                                                    Similarity 7; Conserv
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                                                                                                                                                                                                                                                                                                                QYLRALGLK 9
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translated
                                                                                                                                                                                                                                                                           408
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RESULT

from

N.; Chin, D.B.; August 1997

Stelly,

D.M.

Michelmore,

#text_change 11-Jun-1999

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probable PE protein - Mycobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Parkhill, J.; Wren, B.W.; Mungall, K.; Ketley, J.M.; Churcher, C.; C.W.; Quail, M.; Rajandream, M.A.; Rutherford, K.M.; VanVliet, A.; Wl Nature 403, 665-668, 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ankyrin repeat-containing probable periplasmic protein Cj0834c [imported] - C;Species: Campylobacter jejuni C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 03-Jun-2002 C;Accession: B81356
                                                                                                                                                                                                                                                                                                                                                                                                        R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Hc Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Nature 393, 537-544, 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reveals A;Reference number: A81250; MUID:20150912; PMID:10688204
A;Accession: B81356
                                                                                                                                                                                                                                                                           A;Status: preliminary; nucleic acid sequence not shown;
                                                                                                                                                                                                                                                                                                      A;Atthors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Title: Deciphering the biology of Mycobacterium tuberculosis from the complete A;Reference number: A70500; MUID:98295987; PMID:9634230
A;Accession: E70661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: GB:AL139076; GB:AL111168; NID:g6968128; PIDN:CAB73099.1; A;Experimental source: serotype O2, strain NCTC 11168
                                                                                               Phaseolus glycine-rich cell wall
                     75.0%;
                                                                                                                                                                              ; GB:AL123456;
H37Rv
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Pred. No.
                          Pred. No.
                                             Score 33;
  Mismatches
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                                                                                                                                                                                                      NID:g3261681;
                                                  DB
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                                                                                                  protein
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                                                  Length 413;
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                                                                                                                                                                                                                                                                                   translation
                                                                                                                                                                                                    PIDN:CAB06157.1; PID:g17812
0;
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Gaps
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, S.; Bar
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A; Molecule type: DNA
A; Residues: 1-1467 <STU>
A; Residues: 1-1467 <STU>
R; Stucka, R.; Schwarzlose, C.; Lochmller, H.; Hcker, U.; Feldmann, H.
submitted to the EMBL Data Library, May 1992
A; Description: Molecular analysis of the yeast Ty4 element: homology
A; Reference number: S27465
A; Accession: S27465
                                                                                                                                                                                                                                                                                                                                                       TyB protein - yeast (Saccharomyces cerevisiae) retrotransposon Ty4 (fragment) N; Contains: integrase; proteinase; reverse transcriptase; RNase H C; Species: Saccharomyces cerevisiae C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 26-May-2000 C; Accession: PC1253; S27465 R; Stucka, R; Schwarzlose, C.; Lochmueller, H.; Haecker, U.; Feldmann, H. Gene 122, 119-128, 1992 A; Title: Molecular analysis of the yeast Ty4 element: Homology with Ty1, copi; A; Reference number: JC1482; MUID:93083972; PMID:1333437 A; Accession: PC1253
                                                                                               A; Mobile element: retrotransposon C; Superfamily: TyB protein
                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-1467 <STW>
A; Cross-references: EMBL: M94164
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PC1253
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C; Superfamily: TyE
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J. Biol. Chem. 267, 19798-19805, 1992
A;Title: Ty4, a new retrotransposon from Saccharomyces cerevisiae, A;Reference number: S31261; MUID:93015829; PMID:1328182
A;Accession: S31262
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A;Residues: 1-1465 <JAN>
A;Cross-references: EMBL:S46865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Date: 18-Jun-1993 #sequence_revision
C;Accession: S31262
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A; Cross-references:
                                Matches
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Best Local
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                                                 Local
                                                                                                                                             TY4B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31
                              Similarity 6; Conserv
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5; Conserv
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                              Conservative
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: EMBL:AF017752; NID:g2852685; PID:g2852686
                                             75.0%;
66.7%;
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66.7%;
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55.6%;
                            1;
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                          Score 33; DB 2;
Pred. No. 2.1e+02;
1; Mismatches 2
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                                                                                                                    Ty4
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Pred. No.
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                                                                                                                                                                                                                                                                yeast Ty4 element: homology with Ty1,
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2.1e+02;
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1.6e+02;
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                                                               Length 1467
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                                                                                                                                                                                                                                                                                                                                                                                            and plan
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R;Ng, W.V.; Kennedy, S.P.; Mahairas, G.G.; Berquist, I; Leithauser, B.; Keller, K.; Cruz, R.; Danson, M.J.; Jung, K.H.; Alam, M.; Freitas, T. Proc. Natl. Acad. Sci. U.S.A. 97, 12176-12181, 2000 A;Authors: Hou, S.; Daniels, C.J.; Dennis, P.P.; Omer.
                                                                                                                                                                      RESULT
E84232
                                                                                                            hypothetical protein Vng0750c [imported] - Halobacterium sp. NRC-1
C;Species: Halobacterium sp. NRC-1
C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 02-Feb-2001
                                                                                                                                                                                                                                              В
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                                                                                           C; Accession: E84232
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S56894
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S52611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-1803 <CZI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: S56891
A; Accession: S56894
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A;Reference number: S46798
A;Accession: S52611
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A; Residues: 1-1802 <FAV>
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Best Local :
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Best Local
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A; Mobile element: retrotransposon C; Superfamily: TyB protein
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N;Alternate names: protein YHL008v-a
C;Species: Saccharomyces cerevisiae
C;Date: 05-May_1995 #sequence_revision 19-Oct-1995 #text_change 23-Mar-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Cross-references: EMBL: Z49389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          submitted to the EMBL Data Library, A;Description: The sequence of S. c.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: EMBL:U11581
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                Conservative
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66.7%;
                                                              75.0%;
66.7%;
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Score 33; Db 2;
Pred. No. 2.6e+02;
"'Amatches 2;
                                                                                                                                                                                                                                                                                     Ty4.JL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database,
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Omer,

A.D.; Ebhardt,

H.; Lowe,

T.M.;

B.; Pan, M.; Shukla, H.D.; Lasky; Hough, D.W.; Maddocks, D.G.; Ja

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Result
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Maximum Match 100%
Listing first 45 summaries
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Match
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MURC_HELPV
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 P04 287
O9pna7
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7 escherichia
7 campylobact
13 bacillus st
14 schizosacch
7 fowlpox vir
5 mus musculu
1 homo sapien
1 caulobacter
1 pseudomonas
1 bos taurus
2 kluyveromyc
2 citrobacter
7 klebsiella
2 buchnera ap
2 yersinia pe
2 helicobacte
2 helicobacte
3 musculu
5 leptosphaer
1 homo sapien
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clostridium
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SPB7_HUMAN
    J. Biol.
[2]
                                                      Genew; HGNC:13902; SERPINB7 MIM; 603357; -
                                                                                 EMBL; D88575; BAA31232.1;
EMBL; AF027866; AAC64506.1
HSSP; P05619; 1HLE.
InterPro; IPR000215; Serpin.
Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
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                                                                                 6; AAC64506.1;
1HLE.
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45	44	43	42	41	40	39	38	37	36	35	34
29	29	29	29	29	29	29	30	30	30	30	30
65.9	65.9	65.9	65.9	65.9	65.9	65.9	68.2	68.2	68.2	68.2	68.2
190	184	170	162	141	74	60	2051	1666	1545	1473	1363
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ALIGNMENTS

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SULT 1

STRIMAN

SEQUENCE FROM N.A.

TISSUE-Mesangial cells;

MEDILINE-9836492; pubmed-9710452;

MEDILINE-98376492; pubmed-9710452;

MEDILINE-98376493; pubmed-9710452;

"MEDILINE-98376493; pubmed-9710452;
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     RX KEDLINE-98044033; PubMed-9384377;
RX KEDLINE-98044033; PubMed-9384377;
RA Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S.,
RA Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S.,
RA Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S.,
RA Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S.,
RA Borniss R., Boursier L., Brans A., Braun M., Brignell S.C., Bron S.,
RA Borniss R., Boursier L., Brans A., Braun M., Brignell S.C., Bron S.,
RA Brouillet S., Bruschi C.V., Caldwell B., Capuano V., Carter N.M.,
RA Cholst F., Devine K.M., Dusterhoft A., Ehrlich S.D., Emmerson P.T.,
RA Entlan K.D., Errington J., Fabret C., Ferrari E., Foulger D.,
RA Fritz C., Fujita M., Fujita Y., Fuma S., Galizzi A., Galleron N.,
RA Fritz C., Fujita M., Fujita Y., Fuma S., Galizzi A., Galleron N.,
RA Hilbert H., Holsappel S., Hosono S., Hullo M.F., Itaya M., Jones L.,
RA Gulseppi G., Guy B.J., Haga K., Haiech J., Harwood C. R., Henaut A.,
RA Hilbert H., Holsappel S., Hosono S., Hullo M.F., Itaya M., Jones L.,
RA Kobayashi Y., Koetter P., Koningstein G., Krogh S., Kumano M.,
RA Kurita K., Lapidus A., Lardinois S., Lauber J., Lazarevic V.,
RA Kurita K., Lapidus A., Lardinois S., Lauber J., Lazarevic V.,
RA Medina N., Mellado R.P., Mizuno M., Moestl D., Nakai S., Noback M.,
RA Presecan E., Pujic P., Purnelle B., Rappoport G., Rey M., Reynolds S.,
RA Parro V., Pohl T.M., Portetelle D., Porwollik S., Prescott A.M.,
RA Presecan E., Pujic P., Purnelle B., Rappoport G., Rey M., Reynolds S.,
RA Seto T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,
Sekiyuchi J., Sekowska A., Seror S.J., Serror P., Sadaie Y.,
RA Takeuchi M., Tamakoshi A., Tanaka T., Terpstra P., Tognoni A.,
RA Tosato V., Uchiyama S., Vandenbot M., Vannier F., Vassarotti A.,
RA Voshida K., Yoshikawa H.F., Zumstein E., Yoshikawa H., Danchin A.;
Pata K., Yata K.,
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ACT_SITE
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         subtilis ponA operon, which codes for (PBP) 1 and a PBP-related factor."; J. Bacteriol. 177:326-335(1995).
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Bacteria; Firmicutes;
NCBI_TaxID=1423;
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15-JUN-2002
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P39789;
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RESULT 3
ADH1_CANAL
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DT 01-NOV
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DE Can a
GN ADH1 0
OS Candid
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Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                               MEDLINE=96287648; PubMed=8686375; Bertram G., Swoboda R.K., Gooday G.W., Go "Structure and regulation of the Candida an immunogenic alcohol dehydrogenase."; Yeast 12:115-127(1996).
                                       -!- COFACTOR: ZINC..
-!- SUBUNIT: HOMOTETRAMER (BY SIMILARITY).
-!- SUBCELLULAR LOCATION: Cytoplasmic (Probable).
-!- SIMILARITY: BELONGS TO THE ZINC-CONTAINING AL
                                                                                                                                       dehydrogenase: molecular
monoclonal antibodies.";
                                                                                                                                                                                              SEQUENCE OF Choo K.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Candida albicans (Yeast).
Eukaryota; Fungi; Ascomyo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alcohol dehydrogenase 1 (EC Can a 1) (Can a I).
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01-NOV-1997
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                                                                                                              Clin. Exp. Allergy 21:675-681(1991)
-i- CATALYTIC ACTIVITY: An alcohol
                                                                                                                                                                        "The 40-kilodalton allergen of Candida
                                                                                                                                                                                        Han S.H
                                                                                                                                                                                                                                                                        Pendrak M.L.,
                                                                                                                                                                                                                                                                                     STRAIN-B311A;
                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Saccharomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH1 OR CAD
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01-NOV-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature 390:249-256(1997)
 SWISS-PROT entry
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7; Conserv
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d (OCT-1994)
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(Rel. 32, Last sequence update)
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(Rel. 36, Last annotation update)
(Rel. 36, Createu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                13 FROM N.A.
PubMed=1777830;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ascomycota;
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Pred. No. 3
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5BB082046B7674CB CRC64;
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7)

Institute of Bioinformatics

and the

EMBL outstation

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RESULT
TO STATE OF THE STATE OF
                                                                                       RC STRAIN-JAL-1 / DSM 2661 / ATCC 43067;

RX MEDLINE-96337999; pubMed-8688087;

RA Bult C.J., White O., Olsen G.J., Zhou L., Fleischmann.R.D.,

RA Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D.,

RA Kerlavage A.R., Dougherty B.A., Tomb J.-F., Adams M.D., Reich C.I.,

RA Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A.,

RA Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D.,

RA Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C.,

RA Cotton M.D., Roberts K.M., Hurst M.A., Kaine B.P., Borodovsky M.,

RA Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.;

"Complete genome sequence of the methanogenic archaeon, Methanococcus

RT Jannaschii.";

L. Science 273:1058-1073(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                             Methanococcus jannaschii.
Archaea; Euryarchaeota; Methanococci; Meth
Methanocaldococcaceae; Methanocaldococcus.
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                                                                         - SUBCELLULAR LOCATION: Integral membrane protein (Potential).
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                  SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
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SEQUENCE
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TIGR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cziepluch C., Kordes E., Pujol A., Jauniaux J.-C.; requencing analysis of a 40.2 kb fragment of yeast chromosome X reveals 19 open reading frames including URA2 (5' end), TRK1, PBS2 SPT10, GCD14, RPE1, PHO86, NCA3, ASF1, CCT7, GZE3, two tRNA genes, three remnant delta elements and a Ty4 transposon."; Yeast 12:1471-1474(1996).
                                                                                                                                                                         Transposable SEQUENCE 18
                                                                                                                                                                                                                     Pfam; PF00665; rve; 1.
SMART; SM00343; ZnF_C2HC; 1.
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MEDLINE=97103775; PubMed=8948101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Saccharomycetaceae; Saccharomyces.
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                                                                                                                                                                                                                                                                 InterPro; IPR001584;
InterPro; IPR001878;
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15-JUN-2002 (Rel. 41, L
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Bult C.J., White O., Olsen G.J., Zhou L., Fleischmann R.D., Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D., Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D., Kerlavage A.R., Dougherty B.A., Tomb J.-F., Adams M.D., Reich C.I., Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A., Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D., Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C., Cotton M.D., Roberts K.M., Hurst M.A., Kaine B.P., Borodovsky M., Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.;
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01-NOV-1997
McClelland M., Sanderson K.E., Spieth J., Clifton S.W., Latreille P., Courtney L., Porwollik S., Ali J., Dante M., Du F., Hou S., Layman D. Leonard S., Nguyen C., Scott K., Holmes A., Grewal N., Mulvaney E., Ryan E., Sun H., Florea L., Miller W., Stoneking T., Nhan M.,
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MEDLINE-96337999; PubMe
                                                                                              SPECIES-S.typhimurium; STRAIN-LT2 / SGSC1412
MEDLINE-21534948; PubMed-11677609;
                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                    NCBI_TaxID=602,
                                                                                                                                                                                                                                                        Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                               Salmonella typhi.
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TIGR; MJ0610; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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SIMILARITY: TO C.ELEGANS D1054.13.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Parkhill J., Dougan G., James K.D., Thomson N.R., Pickard D., Wain Churcher C., Mungall K.L., Bentley S.D., Holden M.T.G., Sebalhia M. Baker S., Basham D., Brooks K., Chillingworth T., Connerton P., Cronin A., Davis P., Davies R.M., Dowd L., White N., Farrar J., Feltwell T., Hamlin N., Haque A., Hien T.T., Holroyd S., Jagels K., Krogh A., Larsen T.S., Leather S., Moule S., O'Gaora P., Parry C., Dusil M., State C., Charles M., Care D., Parry C., Dusil M., State C., Charles M., Care D., Parry C., Charles M., Care D., Care
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Mammalia; Eutheria;
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                                                                                                                                     TISSUE-Liver;
                                                                                                                                                                                                                                                                                   Calpain
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Dme sequence of Salmonella enterica serovar Typhimurium
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(Calpastatin).
                                                                                                                         PubMed=2015306;
                                                                                                                                                                                                                                                  (Rat).
                  FROM
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                                                                                                                                                                                                               Chordata;
Rodentia;
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                N.A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MW.;
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TPR 1.
TPR 2.
; 593FCFCC8DBC0CCE CRC64.
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                                                                                                                                                                                                             Craniata; Vertebrata; Sciurognathi; Muridae;
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                  ALTERNATIVE
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Best Local S
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VARSPLIC CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This
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                                                                                                                                                                                                                SEQUENCE FROM N.A. (ISOFORMS MCS-A. STRAIN-C3H; TISSUE-MUSCle; MEDLINE-99333681; PubMed-10403772;
                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOUSE
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REPEAT
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                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse).
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                                                                STRAIN-CD-
                                                                                    SEQUENCE FROM N.A. (ISOFORMS
                                                                                                                                  Biochem.
                                                                                                                                                                                                  Takano J.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: Specific inhibition of calpain (calcium-dependent cysteine protease). Plays a key role in postmortem tenderization of meat and have been proposed to be involved in muscle protein degradation in living tissue.

ALTERNATIVE PRODUCTS: 3 ISOFORMS; A (SHOWN HERE), B AND C; ARE PRODUCED BY ALTERNATIVE SPLICING.

DOMAIN: HAS FOUR INHIBITORY DOMAINS.

SIMILARITY: BELONGS TO THE CALPASTATIN FAMILY.
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                                                                                                                                Biophys.
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149 201
282 334
392 445
529 582
529 582
620 39 76
102 102
654 AA; 713
                                                                                                                                species-specific alternative splicing."; iophys. Res. Commun. 260:339-345(1999).
                                                                                                                                                                         Kawamura T., Murase M., Hitomi K., Maki M.; of mouse calpastatin isoforms: Implications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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INHIBITORY DOMAIN 3.
INHIBITORY DOMAIN 4.
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MISSING (IN ISOFORM B AND ISOFORM C).
K -> E (IN REF. 1).
                                                                                      TCAST1
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Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -> E (IN REF. 1).
4970B89A198D819A CRC64;
                    associated testis-specific
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                                                                                    AND
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thi; Muridae; Murinae; Mus
                                                                                      TCAST2).
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RESULT 10
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REPEAT
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EMBL; AF190152; AAF25194.1; -.
EMBL; AF190151; AAF25193.1; -.
EMBL; X62519; CAA44385.1; -.
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                                                                                                                                                                        SEQUENCE
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InterPro; IPR001259; Calpain_inhib.
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"Multiple forms of rat calpastatin
                                                                                            271 YLEALGIK
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                                                                                                                                 Similarity 6; Conserv
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                                                                                                                                  Conservative
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INHIBITORY DOMAIN
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EGERKGAGETIPILQDHVICSEEREHGSKHH (IN
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DH (IN ISOFORM TCAST2).
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"Genome sequence and comparative analysis of the solvent-producing bacterium Clostridium acetobutylicum.";
J. Bacteriol. 183:4823-4838(2001).
-1- FUNCTION: CAN CATALYZE THE HYDROLYSIS OF ATP IN THE PRESENCE OF SINGLE-STRANDED DNA, THE ATP-DEPENDENT UPTAKE OF SINGLE-STRANDED DNA BY DUPLEX DNA, AND THE ATP-DEPENDENT HYBRIDIZATION OF HYBRIDICATION OF THOMOLOGOUS SINGLE-STRANDED DNAS. IT INTERACTS WITH LEXA CAUSING TO ACTIVATION AND LEADING TO ITS AUTOCATALYTIC CLEAVAGE (BY STMILARTHY).
                                                                                                         Emericella nidulans
Eukaryota; Fungi; As
Eurotiales; Trichocc
SEQUENCE FROM N.A. MEDLINE-86055769;
                                                                                                                                                                                                                                                                                                                                                                                EMENI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                       ALCC OR ADH3
                                                                                                                                                                                                                Alcohol dehydrogenase
                                                                                                                                                                                                                                           01-AUG:1988
15-DEC-1998
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PROSITE; PS50162; RECA_2; 1.
PROSITE; PS50163; RECA_3; 1.
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SMART; SM00382; AAA; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR003593; AAA_ATPase.
InterPro; IPR001553; RecA.
Pfam; PF00154; recA; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entities requires a license agreement (S or send an email to license@isb-sib.ch).
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MEDLINE-21359325; PubMed=11466286;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RECA OR CAC1815.
Clostridium acetobutylicum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Cytoplasmic (By similarity). SIMILARITY: BELONGS TO THE RECA FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 QYLRALGL 8
|| |||:
101 QYARALGV 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 6; Conserv
                                                                                                      Fungi; Ascomycot
; Trichocomaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Firmicutes;
                                                                                                                                                                                                                                         (Rel. 08, 1 (Rel. 08, 1 (Rel. 37, 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    349 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA recombination; SOS response; ATP-binding; DNA-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                     Ascomycota;
PubMed=2998782
                                                                                                                                                           (Aspergillus nidulans)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38089 MW;
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75.0%;
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Last annotation update)
III (EC 1.1.1.1) (ADH I
                                                                                                                                                                                                                                                                                          Created)
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Pred. No.
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                                                                                                                               Pezizomycotina;
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51;
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                                                                                                                               Eurotiomycetes;
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e P., Daly M.J.,
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Best Local
           STRAIN-MB4 / JCM 11007;

MEDLINE-2192816; PubMed=11997336;

Bao Q., Tian Y., Li W., Xu Z., Xuan Z., Hu S., Dong W., Yang J.,
Chen Y., Xue Y., Xu Y., Lai X., Huang L., Dong X., Ma Y., Ling L.,
Tan H., Chen R., Wang J., Yu J., Yang H.;
"A complete sequence of T. tengcongensis genome.";
Genome Res. 12:689-700(2002).
-i- FUNCTION: Converts 2C-methyl-D-erythritol 2,4-cyclodiphosphate
(ME-2,4cPp) into 1-hydroxy-2-methyl-2-(E)-butenyl 4-diphosphate
(BY similarity).
-i- PATHWAY: Nonmevalonate terpenoid biosynthesis pathway; sixth st
-i- SIMILARITY: BELONGS TO THE ISPG FAMILY.
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15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
1-hydroxy-2-methyl-2-(E)-butenyl 4-diphosphate synthase.
ISPG OR GCPE OR TTE1400.
                                                                                                                                                                                                                                                                                                                                   Thermoanaerobacteriaceae; NCBI_TaxID=119072;
                                                                                                                                                                                                                                                                                                                                                                             Thermoanaerobacter tengcongensis.
Bacteria; Firmicutes; Clostridia;
                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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Pfam; PF00107; adh_zinc; 1.
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InterPro; IPR002328; ADH_zinc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entities requires a license agreement (See http://www.isb-sib.ch/announce/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a coefficient the Swiss Institute of Bioinformatics and the EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   McKnight L., Kato H., Upshall A., Parker M.D., O'Hara P.J., O "Identification and molecular analysis of a third Aspergillus nidulans alcohol dehydrogenase gene."; EMBO J. 4:2093-2099(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SUBUNIT: HOMOTETRAMER.
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5; Conserv
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                                              InterPro; IPR002106; AATRNA_11gaseII.
InterPro; IPR004517; HisS_second.
InterPro; IPR002314; tRNA-synt_2b.
Pfam; PF00587; tRNA-synt_2b; 1.
TIGRPAMS; TIGR00443; hisS_second; 1.
                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a celebrate the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and formodified and this statement is not removed.
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Deckert G., Warren P. V., Gaasterland T., Young W.G., Ler Deckert G., Warren P. V., Gasterland T., Keller M., Aujay M. Graham D.E., Overbeek R., Snead M.A., Keller M., Aujay M. Feldman R.A., Short J.M., Olson G.J., Swanson R.V.;
"The complete genome of the hyperthermophilic bacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aquifex.
NCBI_TaxID=63363;
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30-MAY-2000 (Rel. 39, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
ATP phosphoribosyltransferase regulatory subunit.
HISZ OR HISS2 OR AQ_1155.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   regulation of histidine metabolism.
SUBUNIT: Binds to hisG (By similarity).
SUBCELLULAR LOCATION: Cytoplasmic (Probable).
MISCELLANEOUS: This function is generally fulfilled terminal part of hisG, which is missing in some bact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FUNCTION: May allow the regulation of ATP phosphoribosyltransferase activity by histidine PATHWAY: Histidine biosynthesis; first step. Ver
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RESULT OF SECTION SECT
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15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
Penicillin-binding protein 5 precursor (D-alanyl-D-alanine carboxypeptidase fraction A) (EC 3.4.16.4) (DD-peptidase)
(DD-carboxypeptidase) (PBP-5)
DACA OR PFV OR B0632 OR 2077 OR ECS0670.
Escherichia coli, and
Escherichia coli, and
Escherichia coli (0157:H7.
                                                                                                                                                                                                                                                                                    Sampei G., Seki Y., Tagami H., Yano M., Horiuchi T.;
"A 718-kb DNA sequence of the E corresponding to the 12.7-28.0 DNA Res. 3:137-155(1996).
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MEDLINE=97426617; PubMed=9278503;
Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F.
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Perna N.T., Plunkett G. III, Burla
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Broome-Smith J.K., Ioannidis II., Edelman A., Spr
"Nucleotide sequences of the penicillin-binding
of Escherichia coli.";
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                                                                                                                                               Araujo R., Aparicio A., Davis I

n R., Kalman S., Komp C., Kurdi

Oefner P., Roberts D., Schramm S

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       J.,
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                                                                                                                                                                                                                                                                MEDLINE=93143736; PubMed=8424800;
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MEDLINE-8410878; PubMed-6319180;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Takase I., Ishino F., Wachi M., Kamata F. Matsuzawa H., Ohta T., Matsuhashi M.; "Genes encoding two lipoproteins in the Escherichia coli chromosome."; J. Bacteriol. 169:5692-5699(1987).
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                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-92283850;
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MEDLINE-21156231; PubMed-11258796;
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Welch R.A., Blattner F.R.;
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STRAIN-NCTC 11168;
MEDLINE-20150912; PubMed-10688204;
MEDLINE-20150912; PubMed-10688204;
Parkhill J., Wren B.W., Mungall K., Ketley J.M., Clasham D., Chillingworth T., Davies R.M., Feltwell Basham D., Karlyshev A.V., Moule S., Pallen M.J., Jagels K., Karlyshev A.V., Moule S., Pallen M.J., Ouail M.A., Rajandream M.A., Rutherford K.M., van Whitehead S., Barrell B.G.;
                                                                                                                       reveals hypervariable sequences."; Nature 403:665-668(2000).
-!- FUNCTION: Not known.
                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation
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InterPro; IPR001967; Ala/AlaCBptase1.
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European Bioinformatics Institute. The by non-profit institutions as long
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L; AE000168; AAC73733.1; -.
L; D90703; BAA35275.1; -.
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L; D82598; AAB40832.1; -.
L; AE002542; AGC4966.1; -.
L; AP002552; BAB34093.1; -.
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RA Medina N., Mellado R.P., Mizuno M., Moestl D., Nakai S., Noback M.,
RA Noone D., O'Reilly M., Ogawa K., Ogiwara A., Oudega B., Park S.H.,
RA Parro V., Pohl T.M., Portetelle D., Porwollik S., Prescott A.M.,
RA Prescan E., Pujic P., Purnelle B., Rapoport G., Rey M., Reynolds S.,
RA Rieger M., Rivolta C., Rocha E., Roche B., Rose M., Sadaie Y.,
RA Sato T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,
Schleuchi J., Sekowska A., Seror S.J., Serror P., Shin B.S., Soldo B.,
RA Sorokin A., Tacconi E., Takagi T., Takahashi H., Takemaru K.,
Takeuchi M., Tanakoshi A., Tanaka T., Terpstra P., Tognoni A.,
RA Tosato V., Uchiyama S., Vandenbol M., Vannier F., Vassarotti A.,
RA Viari A., Wambutt R., Wedler E., Wedler H., Weltzenegger T.,
RA Winters P., Wipat A., Yamamoto H., Yamane K., Yasumoto K., Yata K.,
RA Yoshida K., Yoshikawa H.F., Zumstein E., Yoshikawa H., Danchin A.;
"The complete genome sequence of the gram-positive bacterium Bacillus
                                    Query
Best I
                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                   Submitted (DEC-2001) to the EMBI EMBL; BC019504; AAH19504.1; -. InterPro; IPRO01680; WD40. Pfam; PRO0400; WD40; 12. PRINTS; PRO0320; GPROTEINBRPT. SMART; SM00320; WD40; 13.
                                                                                                                                                                                                                                                              Hypothetical 88.4 kDa protein.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; (Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Piam; PP00376; merr; 1.
SMART; SM00422; HTH_MERR; 1.
DNA-binding; Transcription recommended 270 AA; 31783 MW;
                                                                           Hypothetical
SEQUENCE 8
                                                                                             PROSITE; PS00678; WD_REPEATS_1; UNKNOWN_2
PROSITE; PS50082; WD_REPEATS_2; 9.
PROSITE; PS50294; WD_REPEATS_REGION; 1.
                                                                                                                                                                                                                 Strausberg
                                                                                                                                                                                                                                                                                                                                01-MAR-2002
01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                          Q8VE90;
                                                                                                                                                                                                                                                                                                                                                                       Q8VE90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kunst F., Ogasawara N., Submitted (NOV-1997) to -!- SIMILARITY: BELONGS
                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                      NCBI_TaxID=10090;
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EMBL; AB001488; BAA19380.1;

EMBL; Z99106; CAB12353.1; -

Interpro; IPR000551; HTH_Mer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-168;
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[3]
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                                      Local
                                                Match
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                       Similarity 7; Conserv
QYLRALGL
                                                                                                                                                                                                                                                                                                                                                                                                                                   KYLRALGL
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2 (TrEMBLrel. 20,
2 (TrEMBLrel. 21,
                                                                           1 protein
802 AA;
                         Conservative
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                                                                        88379 MW;
                                    79.5%;
87.5%;
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the EMBL/GenBank/DDBJ
TO THE MERR FAMILY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        regulation;
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Last sequence update)
Last annotation update)
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                       Pred.
1; Mi
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                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                        EFC3CFB04245491B CRC64;
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1C487674F59A6797
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38;
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J databases.
F TRANSCRIPTIONAL
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RESULT
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             RESULT
Q96A78
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SEQUENCE FROM N.A.

22 STRAIN-MSB8 / DSM 3109;
23 STRAIN-MSB8 / DSM 3109;
24 MEDLINE-99287316; PubMed=10360571;
25 MEDLINE-99287316; PubMed=10360571;
26 Nelson K.E., Clayton R.A., Gill S.R., Gwinn M.L., Dodson R.J.,
27 Nelson M.E., Clayton R.A., Gill S.R., Gwinn M.L., Dodson R.J.,
28 Nelson K.E., Clayton R.A., Gill S.R., Jening K.D., Garrett M.M.,
28 NcDonald L., Utterback T.R., Malek J.A., Linher K.D., Garrett M.M.,
29 Nachardson D.,
20 Stewart A.M., Cotton M.D., Pratt M.S., Phillips C.A., Richardson D.,
20 Stewart A.M., Cotton M.D., Pratt M.S., Phillips C.A., White O.,
21 Stewart A.M., Cotton M.D., Pratt M.S., Phillips C.A., White O.,
22 Nachardson J.S., Smith H.O., Venter J.C., Fraser C.M.,
23 Providence for lateral gene transfer between Archaea and Bacteria from genome sequence of Thermotoga maritima.";
21 Pendl; AB001764; AB036108.1; -.
22 Nachardson J. Stephen J
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Best Local
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01-NOV-1999
01-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00678; WD_REPEATS_1; UNKNOWN_2.

PROSITE; PS50082; WD_REPEATS_2; 8.

PROSITE; PS50294; WD_REPEATS_REGION; 1.

Hypothetical protein; Repeat; WD repeat.

SEQUENCE 808 AA; 89034 MW; 01BDF217F8D17D30 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacteria; Thermotogae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thermotoga maritima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9X0C1;
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Submitted (JUL-2001)
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Submitted (SEP-2001)
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01-DEC-2001 (TrEMBLrel. 19, Last sequence up
01-JUN-2002 (TrEMBLrel. 21, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=2336;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hypothetical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q96A78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=LUNG;
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L; BC014007; AAH14007.1;
L; BC010231; AAH10231.1;
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666 RYLRALGL
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9 (TrEMBLrel.
1 (TrEMBLrel.
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87.5%;
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WD REPEATS (TRP-ASP DOMAINS)
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Pred. No. 1.
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Best Local :
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Best Local
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                                                                                                                                                                                                                                                                                             O9HDD6 PRELIMINA...,
O9HDD6;
O1-MAR-2001 (TrEMBLrel. 16, Created)
O1-MAR-2001 (TrEMBLrel. 19, Last sec
O1-DEC-2001 (TrEMBLrel. 19, Last an)
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Pfam; PF00462; glutaredoxin; 1.
PRINTS; PR00160; GLUTAREDOXIN.
Complete proceome.
SEQUENCE 80 AA; 9127 MW; B180;
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Suvarna K., Bartiss A., Wong B.;
"Mannitol-1-phosphate dehydrogenase from Cryptococcus neoformans
"Inc-containing long-chain alcohol/polyol dehydrogenase.";
Microbiology 146:2705-2713(2000).
EMBL; AF186474; AAG17013.1; -.
                                                                                                                                                                                                                       Cryptococcus neofo
Eukaryota; Fung1; |
Tremellomycetidae;
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"The evolution of cryptochrome genes.";
Submitted (AUG-1997) to the EMBL/GenBank/DDBJ
EMBL; AJ000695; CAA04247.1; -.
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;

Astoridae; euasterids I; Solanales; Solanaceae; Solanum.
                                                                                                              MEDLINE-20476444; PubMed-11021946;
                                                                                                                                     STRAIN-H99;
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Pfam; PF03441; FAD_binding_7; 1.
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    Basidiomycota; Hymenomycetes;
    Tremellales; Tremellaceae; F.
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Matches
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Q9AGZ2;
01-JUN-2001 (TrEMBLrel. 17, Cr
01-JUN-2001 (TrEMBLrel. 17, La
01-JUN-2002 (TrEMBLrel. 21, La
Phosphoribosylaminoimidazole c
                                                                                  Q9RXMO;
01-MAY-2000
01-MAY-2000
01-JUN-2002
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SEQUENCE
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Ohashi N., Rikhisa Y., Unver A.;
"Analysis of Transcriptionally Active Gene Clusters of Major Outer
"Analysis of Transcriptionally Active Gene Clusters of Major Outer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J. Clin.
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Deinococcus radiodurans.
Bacteria; Thermus/Deinococcus
                                                              Hypothetical
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EMBL; AF324792; AAK31311.1; -.
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NCE 361 AA; 37537 MW;
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group; Deinococci; Deinococcales;
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Best Local
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EMBL; AF130426; AAF72557.1; ---
EMBL; AF130425; AAF72556.1; ---
InterPro: IPR000474; DNA_photolyase.
InterPro: IPR002081; DNA_photolyase.
InterPro: IPR002081; DNA_photolyase; InterPro: IPR002081; FAD_binding_7.

Pfam; PF00875; DNA_photolyase; 1.

Pfam; PF00875; DNA_photolyase; 1.
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PRODOM; PD004390; DNA_Photolyase; 1.
PROSITE; PS00394; DNA_PHOTOLYASES_1_1; 1.
SEQUENCE 635 AA; 72249 MW; 937445E04DB86D6B CRC64;
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids I; Solanales; Solanaceae; Solanum.
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Nebuloso E., Giuliano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=20267445; PubMed=10809448; Perrotta G., Ninu L., Flamma F., W
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Science 286:1571-1577(1999).
EMBL; AE001890; AAF09871.1;
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01-JUN-2002 (TrEMBLrel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGR; DR0290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Genome sequence of the radioresistant
radiodurans R1.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-20036896;
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NCBI_TaxID=1299;
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YLRAIGLR
                                          YLRALGLK
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Eisen J.A., Heidelberg J.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al protein;
406 AA; 4;
                                                                                        Conservative
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75.0%;
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42901 MW;
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Pred. No.
                                                                                                             Score 34;
Pred. No.
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6B40D3F1523F9FCB
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RESULT 10 Q9IBW6

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Best Local S
Matches 6
Pfam; PF(
Helicase.
                   STRAIN-MD5;
Tulman E.R., Afonso C.L., Lu Z., Zsak L., Roch
Tulman E.R., Afonso C.L., Lu Z., Zsak L., Roch
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ
EMBL; AF243438; AAG14200.1; -.
InterPro; IPR004996; Herpes_HEPA.
Pfam; PF03324; Herpes_HEPA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lee L.F., Wu P., Sui D., Ren D., Kamil J., Kung H.J., Witter R.L.;
"The complete unique long sequence and the overall genomic organization of the GA strain of Marek's disease virus.";
Proc. Natl. Acad. Sci. U.S.A. 97:6091-6096(2000).

EMBL; AF147806; AAF66744.1;
EMBL; AF147806; AAF66744.1;
InterPro; IPR004206; DNA_POLB.
InterPro; IPR004296; Herpes_HEPA.
Pfam; PF03324; Herpes_HEPA; 1.
PROSITE; PS00116; DNA_POLYMERASE_B; UNKNOWN_1.
SEQUENCE 768 AA; 86859 MW; E4CA706C4D185C88 CRC64;
                                                                                                                                                                                                      Tulman E.R., Afonso C.L., Lu Z., 2sak I "The genome of a very virulent Marek's J. Virol. 74:7980-7988(2000).
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01-MAR-2001 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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01-OCT-2000
01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                   Turkey herpesvirus.
Viruses; dsDNA viruses,
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                                                                                                                                                                                                                                                                              MEDLINE=20392152; PubMed=10933706;
                                                                                                                                                                                                                                                                                                         STRAIN=MD5
                                                                                                                                                                                                                                                                                                                                                                                                Alphaherpesvirinae;
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Viruses; dsDNA viruses,
Alphaherpesvirinae; Maro
NCBI_TaxID=10390;
                                                                                                                                                             SEQUENCE FROM N.A.
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[2]
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16, Last sequence update)
21, Last annotation update)
e associated protein-like pr
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sease virus
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Best Local S
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Matches 7
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InterPro; IPR003591; LRR_typ.
InterPro; IPR002590; Ser_thr_pkinase.
InterPro; IPR0040400; STY_pkinase.
InterPro; IPR001245; Tyr_pkinase.
Pfam; PF00560; LRR; 7.
Pfam; PF00069; pkinase; 1.
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PRODOM; PD000001; EUK_pkinase; 1
SWART; SM00370; LRR; 5.
SWART; SM00369; LRR_TYP; 2.
SWART; SM00221; STYKC; 1.
SWART; SM00221; STYKC; 1.
SWART; SM00229; TYCKC; 1.
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InterPro; IPR0001511; LRR.
InterPro; IPR0001511; LRR.
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eueurosids II; Brassicales; Brassicaceae; Arabidopsis.
  Q8XK60;
01-MAR-2002
                                                Q8XK60
                                                                                                                                                                                                                                                                                                                                                Kinase; Receptor.
NON_TER 1013 10
SEQUENCE 1013 AA;
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A., Palm C.J.,
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F1N18.22.
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Putative receptor-like
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PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
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16, Last sequence update)
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serine/threonine kinase-partial
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Pred. No.
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Pred. No.
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eudicots; Rosidae;
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ID 08R8

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flesh-eater.";
Proc. Natl. Acad. Sci. U.S.A. 99
EMBL; AP003191; BAB81249.1; -.
InterPro; IPR004472; BioD.
TIGRFAMS; TIGR00347; bioD; 1.
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QBJUN-2002 (TrEMBLrel. 21, Cr
Q1-JUN-2002 (TrEMBLrel. 21, La
Q1-JUN-2002 (TrEMBLrel. 21, La
Tresthatical protein TTE2045.
Q8ZT63;
Q8ZT63;
01-MAR-2002
01-MAR-2002
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Bacteria; Firmicutes; Bacillus/Clostridium group; Clostridia; Clostridiales; Clostridiaceae; Clostridium.
                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-MB4T / JCM11007;
MEDLINB-21902816; PubMed-11997336;
MEDLINB-21902816; PubMed-11997336;
Bao Q., Tian Y., Li W., Xu Z., Xuan Z., Hu S., D
Bao Q., Tian Y., Li W., Xu Z., Xuan Z., Hu S., D
Chen Y., Xue Y., Xu Y., Lai X., Huang L., Dong X
Tan H., Chen R., Wang J., Yu J., Yang H.;
Tan Complete sequence of T. tengcongensis genome.
Genome Res. 12:689-700(2002).
Genome Res. 12:689-700(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shimizu T., Ohtani K., Hirakawa H., Ohshima K., Yamashi
Shiba T., Ogasawara N., Hattori M., Kuhara S., Hayashi
"Complete genome sequence of Clostridium perfringens, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. STRAIN=13 / TYPE A PubMed=11792842;
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Bacteria; Firmicutes; Bacillus/Clostridium group; Clostridia;
Thermoanaerobacteriales; Thermoanaerobacteriaceae; Thermoanae,
NCBI_TaxID=119072;
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                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AE013154; AAM25; Hypothetical protein;
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228 AA;
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Pred. No. 1.1e
4; Mismatches
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855F281CFCAD8297
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Hayashi H.;
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Yang J.

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Gaps

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DT 01-JUN-2002 (TPEMBLrel, 21, Last annotation update)

E Hypothetical protein PAE3418.

S PAE3418.

OS PAF3418.

OS PAF3418.

OC Thermoproteaceae: Phermoprotei; Thermoproteales;

OC Thermoproteaceae: Pyrobaculum.

OX NCBI_TaxID-13773;

RN [1]

RN FILT-Gibbon S.T., Ladner H., Kim U.-J., Stetter K.O., Simon M.I.,

RA FILT-Gibbon S.T., Ladner H., Kim U.-J., Stetter K.O., Simon M.I.,

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RA FILT-Gibbon S.T., Ladner H., Kim U.-J., Stetter K.O., Simon M.I.,

RA FILT-Gibbon S.T., Ladner H., Kim U.-J., Stetter
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Compugen Ltd

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Result
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7: /SIDSZ/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*

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ALIGNMENTS	AAY41030 AAB11315 AAY72652 ABB74947	AAB10954 AAY72651 ABB74946 AAW48391 AAW44120 AAE14266	AAY28644 AAY41029 AAY25926 AAB11314 AAB110953	AAR13493 AAB48382 AAU78359 ABB48359 ABB48359 AAV72661	ABG28280 AAB99057 AAB31515 ABG24021 AAG92577 ABB77879 AAU78358	AAG64286 AAB83076 AAU28187 AAB93480 AAB93480 AAB53280 AAB53280 AAB53280
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RESULT 1 AAR57112 AAR57112 standard; peptide; Human megakaryocyte differentiation factor peptide 16-AUG-1994 (first entry) AAR57112; 20 A

Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.

6.

Homo sapiens

EP583884-A. 17-JUL-1992; 04-MAR-1993; (SUNR) SUNTORY LTD. (TSUJ/) TSUJIMOTO M. 19-JUL-1993; 23-FEB-1994. Misc-difference 92JP-0212305 93JP-0067339 93EP-0305654 Location/Qualifiers /note= "not determined"

Ishida N, Iwasa F,

Kurihara T,

Miura K,

Nakazato H;

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RESULT 2
AAR48379
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Matches 19; Conserv
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       Human MDF can
                                                                                                                      New megakaryocyte differentiation factor - isolated from human epidermoid carcinoma cells, used to treat conditions involving
                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUL-1992;
04-MAR-1993;
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(TSUJ/) TSUJIMOTO M.
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M, Tsuruoka
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Yamaguchi N, Yamaichi
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer chemotherapy.
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of human epidermoid
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maichi K;
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                                                                                                                                                                                                                                                This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 62-64; 100pp; Japanese.
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(MIYA/) MIYATA T.
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rat; murine.
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ADLSGIASGGRLYISRMMHK 324
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95.0%;
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RESULT 5
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Best Local
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                                                                                                                                                                                                                                                       diaghosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising:

(a) antimegsin protein antibody attached to solid magnetic particles;

(b) direct or indirect fixing for the antibody to the particles; and (2) a magnet. The process is useful for evaluating renal function and (3) a magnet. The process is useful for evaluating renal function and (3) a magnet.
         Human; megsin; mesangial cell proliferative nephritis; nephrotropic;
transgenic mouse; glomerular disease; animal model; drug screening.
                                          Human megsin protein
                                                              10-JUL-2001
                                                                                  AAB83075
                                                                                                     AAB83075 standard; Protein;
                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Page 66-69;
                                                                                                                                                                                                                                                                                                                                                                                                        Evaluating renal function comprises assaying megsin biological sample -
                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-611642/58.
N-PSDB; AAA99294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND LTD
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200057189-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Megsin; mesanglum-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001
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                                                                                                                                                                            \vdash
                                                                                                                                                                                              19; Conservative
                                                                                                                                                       380
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                                                            (first entry)
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99JP-0306623.
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                                                                                                                                                                                                         91.8%;
                                                                                                                                                                                                                                                                                                                                                                                  93pp; Japanese
                                                                                                     380
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                                                                                                                                                                                              Score 90; DB
Pred. No. 2.76
0; Mismatches
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                                                                                                                                                                                            DB 21; LC
. 2.7e-06;
. 7. 1;
                                                                                                                                                                                                                  Length 380;
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AAY08256
ID AAY0
  PARK TRANSPORT
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Best Local 9
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                                                                                                                        Key
Protein
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N-PSDB; AAF82438.
                                                                       01-APR-1999
                                                                                                                                                       Mus musculus
                                                                                                                                                                                                         Mouse megsin protein
                                                                                                                                                                                                                              14-JUL-1999
                                                                                                                                                                                                                                                  AAY08256;
                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                            this method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
(KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                               22-SEP-1997;
                                                  22-SEP-1998;
                                                                                          WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                        305
                                                                                                                                                                                                                                                                                                                                                               l Similarity
19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                        380 AA;
                                                                                                                                                                                                                                                                                                                                                                Conservative
                               .97JP-0275302
                                                                                                               /note-
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sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useful
                                                                                                                                                                                                                                                                                                                    Megsin; mesangial cell; treatment; diagnosis; disease; IgA nephropathy; human; rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments \,\cdot\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY08256 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is human megsin. The human megsin coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 4; Page 44-46; 62pp; Japanese
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADLSGIASGGRLYISRMMHK 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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98WO-JP04269
                                                                                                                                                                                      Location/Qualifiers
1..368
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                                                                                                                                                       "partial sequence"
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Pred. No. 2.76
0; Mismatches
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2.7e-06;
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RESULT 7
AAB24151
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Best Local S
Matches 16
        The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and
                                                                                                                                                                                                                                                                                                                                                                                        Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
   <u>6</u>69
                                                                                               Disclosure;
                                                                                                                      Evaluating biological
                                                                                                                                                                                          Miyata T;
                                                                                                                                                                       WPI;
                                                                                                                                                                                                                 (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND LTD
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                 17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                WO200057189-A1
                                                                                                                                                                                                                                                                                                                                                                      Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse megsin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB24151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB24151 standard; Protein; 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Megsin
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  a magnet.
                                                                                                                                                                    2000-611642/58
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein expressed specifically in mesangial cells
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                                                                                                                                                         AAC55239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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|||||||||||||||:|::| |
ADLSGIASGGRLYVSKLMHK 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page 76-79; 100pp; Japanese
                                                                                                                      renal function comprises assaying megsin protein sample % \left( \mathbf{r}\right) =\mathbf{r} .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
                                                                                            Page 89-91; 93pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                 2000WO-JP01646
                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
 The process
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
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99JP-0306623.
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   ŝ
   useful
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Pred.
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for evaluating
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В Ş

293

ADLSGIASGGRLYISRMMGK

312 20 Matches

16; Conservative

Indels

0;

Gaps

0;

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RESULT 8
AAB83077
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Best Local :
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Matches
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                                                                                         for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases Highly uniform models can be made easily and in large numbers using
                                                                                                                   The present sequence is murine megsin protein. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useful for analysing the pathology of chronic glomerular diseases and for
                                                      Sequence
                                                                                                                                                                                                                                                                                                                                          (KURO/)
                                                                                                                                                                                                            Disclosure;
                                                                                                                                                                                                                                    Mouse model for mesangial cell proliferative nephritis and screening of new treatments -
                                                                                                                                                                                                                                                                                        WPI; 2001-300136/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus
                                                                                                                                                                                                                                                                            N-PSDB; AAF82440
                                                                                                                                                                                                                                                                                                                  Miyata
                                                                                                                                                                                                                                                                                                                                                                                 06-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              transgenic mouse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murine megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB83077;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the mouse megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                   12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-JUL-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                                                                          KUROKAWA K.
MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADLSGIASGGRLYISRMMGK
                                                      368 AA;
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                                                                                                                                                                                                            Page 52-53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-JP06988.
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                                                                                                                                                                                                                                                                                                                                                                                 99JP-0285736
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein;
            84.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84.7%;
                                                                                                                                                                                                        62pp; Japanese
: Score 83; DB
: Pred. No. 3.4e
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 83; DB Pred. No. 3.4e 3; Mismatches
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                                                                                        easily and in large numbers
 DB 22; |
3.4e-05;
hes 1;
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                        Length 368;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 368;
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                                                                                                                                                                                                                                               development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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RESULT 10
AAB24150
ID AAB24
XX
AC AAB24
XX
DT 30-JI
XX
DE Rat m
XX
Megs!
KW Megs!
KW diagr
XX
KW diagr
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AAYOB255
ID AAYOB255

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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes the isolation of novel megsin nucleic acid an proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
                                                                                                                                                                                                Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                            Misc-difference
                                                                Location/Qualifiers Misc-difference 51
                                                                                                                                                  Rattus
                                                                                                                                                                                                                                                                                                    Rat megsin
                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                        AAB24150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB24150 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 69-72; 100pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Megsin protein expressed specifically in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-276983/23.
N-PSDB; AAX56712.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Megsin; mesangial cell; treatment; diagnosis; disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rat megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY08255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY08255 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human; rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
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                                                                                                                                                    norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l Similarity
16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADLSGIASGGRLYVSKLMHK 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADLSGIASGGRLYISRMMGK 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                  protein sequence SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97JP-0275302
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                            94
/note= "unspecified"
                                                   /note= "unspecified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 380 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 83; DB
Pred. No. 3.6e
3; Mismatches
                                                                                                                                                                                                                                                                                                    IJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 20;
3.6e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380;
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RESULT 11
AAG64286
ID AAG64
XX AAG6
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XX Rat;
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XX Rat;
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the rat megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Evaluating renal function comprises assaying megsin protein biological sample \,\,\cdot\,\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-611642/58
N-PSDB; AAC55238.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (KURO/)
                                                                                                                                                                                                                                                                                    WO200148019-A1
                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                        Rat; megsin; renal mesangial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Rat megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAG64286;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-MAR-2000; 2000WO-JP01646
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                                              (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                               28-DEC-1999;
                                                                                                                                                                                26-DEC-2000;
                                                                                                                                                                                                                                   05-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MIYA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUROKAWA K.
FUSO PHARM IND LTD
MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard; Protein; 380 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADLSGIASGGRLYVSKLMHK 324
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                                                                                                                                                                                2000WO-JP09251
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                                                                                                                               99JP-0373677
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99JP-0306623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 83;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           mesangium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 21;
3.6e-05;
                                                                                                                                                                                                                                                                                                                                                                                           proliferative nephritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 380
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Miyata T;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
       The present sequence is rat megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useful for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                   WPI;
                                                                                                                                                                                                                                                  (KURO/)
                                                                                                                                                Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments
                                                                                                                                                                                                                                                                                                              06-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus
                                                                                                                         Disclosure;
                                                                                                                                                                                                                                                                                        06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                        12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                WO200124628-A1
                                                                                                                                                                                                                                                                                                                                                                                                                 transgenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-JUL-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB83076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a novel antibody which recognises a peptide consisting of residues 341-354 of rat megsin protein. The prese sequence is the protein sequence for rat megsin, which was used in the present invention. Mesgin is highly expressed in renal mesangial cells and its level is elevated in mesangium proliferative nephritis. Assay of the serum or urine level using the antibody is therefore indicative of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 54-56; 63pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antibody recognizing diagnosis of mesangium pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 serum or urine level using the s type of disorder.
                                                                                                                                                                                                                                                                                                                                                                                                          megsin; mesangial cell proliferative nephritis; nephrotropic; scenic mouse; glomerular disease; animal model; drug screening
                                                                                                                                                                                                 2001-300136/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         305
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DB; AAH48181.
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                                                                                                                                                                                                                                                  KUROKAWA K.
                                                                                                                                                                                      AAF82439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADLSGIASGGRLYISRMMGK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADLSGIASGGRLYVSKLMHK 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380
                                                                                                                        Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                              2000WO-JP06988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                       99JP-0285736
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                                                                                                                        48-50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ng a partial sequence of proliferative nephritis
                                                                                                                   62pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           380
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.6e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 22;
      large numbers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rat megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
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tive of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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RESULT 13
AAU28187
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                      involved in increasing haematopoiesis, stem cell survival, bone growth and remodeling. (I), (II) and modulators of (II) are useful for prophylaxis or treatment of one or more cancers. (II) is also useful for creating transgenic animals useful for studying the in vivo activities of the polypeptide as well as for studying modulators of the polypeptides. (I) induces the proliferation of neural cells and regeneration of nerve
              and
                                                                                                                             The
                                                                                                                                                                                                                                                                                                                                                              17-JUN-2000;
14-JUL-2000;
19-SEP-2000;
                                                                                                 and polynucleotides (II). (I) and (II) are useful for treating inflammatory conditions such as arthritis, nephritis, Crohn's disease, inchammatory conditions such as arthritis, nephritis, Crohn's disease, inchammatareperfusion injury, shock, sepsis, immune responses, and is
                                                                                                                                                                                       Novel polypeptides and nucleic acids obtained from prepared from various human tissues, for diagnosis cancer, neurological, inflammatory, and autoimmune
                                                                                                                                                                                                                                                                                   Zhao
                                                                                                                                                                                                                                                                                              Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ischaemia-reperfusion injury; haematopoiesis; cancer; neuropathy; transgenic animal; Alzheimer's disease; Parkinson's disease; burn; transgenic animal; Sclerosis; platelet disorder; thrombocytopenia; amyotrophic lateral sclerosis; platelet disorder; thrombocytopenia;
                                                                                                                                                                                                                                                                                                                                                                                                  07-MAR-2000;
19-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        severe combined immunodeficiency; SCID; autoimmune disorder; multiple sclerosis; rheumatoid arthritis; diabetes mellitus; fertility; analgesic; pain; antigen.
                                                                                                                                                                   Example
                                                                                                                                                                                                                                                                                                                        (HYSE-)
                                                                                                                                                                                                                                                                                                                                                  20-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                        05-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200166689-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gut protection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ulcer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAU28187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAU28187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel human secretory protein,
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           brain tissue and is useful
                                                                                                                                          invention relates
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            osteoporosis; bone degenerative disorder; periodontal disease; btection; lung; liver fibrosis; immune deficiency; infection;
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                                                                                                                                                                 5; SEQ ID No 356; 107pp; English.
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                                                                                                                                                                                                                                                                                Liu C,
Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    380
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                                                                                                                                                                                                                                                                                  Asundi V,
Drmanac 1
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                                                                                                                                       to novel isolated human secreted polypeptides
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          for the treatment of
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          and
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Wang J;
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02-MAY-2000;
09-JUN-2000;
                                                                                                      Primer sets for synthesizing polynucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis. In addition, (I) is involved in chemotactic or chemokinetic activity, regulation of haematopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as thrombocytopenia
                                                                                                                                                                                                                                                                                                                   WPI; 2001-318749/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ota T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HELI-)
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27-AUG-1999;
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10; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Isogai T,
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2000JP-0183767.
2000JP-0241899.
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99JP-0300253
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Nishikawa
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83.3%;
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Pred. No.
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                                                                                                                                                   detection by the
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Claim 8;

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ID 12768;

2537pp + CD

ROM; English

WPI; 2002-041392/05 N-PSDB; ABA90345.

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Best Local :
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                                           Agarwal
Lai Y,
                                                                                                                                                                                                                                                                                                                                                                                                           Human; nootropic; neuroprotective; anticonvulsant; antidepressant; neuroleptic; tranquiliser; antiarrhythmic; cardiant; antiasthmatic; antiinflammatory; antilipaemic; hepatotropic; virucide; antidiabetic;
                                                                                                                                                                                                                                                                                                                                               nephrotropic; anorectic; cytostatic; vaccine; neurological diseas cardiovascular disease; respiratory disease; liver disease; renal disease; setletal muscle disease; gastrointestinal disease; placental disease; testicular cancer; male fertility; pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   represent oligonucleotides, of the present invention.
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25-MAY-2000;
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                                           Murdock
Q;
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2000US-203336P.
2000US-207087P.
2000US-207546P.
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BEECHAM
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Pred. No.
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The invention relates to an isolated polypeptide comprising a 277, 480, CC 583, 581, 628, 424, 638, 229, 310, 841, 241, 369, 382, 185, 586, 1026, CC 844, 782, 262, 394, 471, 485, 286, 533, 495, 350, 619, 490, 462, 255, CC 784, 252, 593, 472, 607, 781, 640, 686 or 154 amino acid sequence as GC given in the specification. The polypeptides, modulators of the CC polypeptides and antibodies against the polypeptides are useful for CC including Alzheimer's, parasupranuclear palsy, Huntington's diseases CC including congestive heart failure, Hodgkin's disease and myocardial CC infarction; respiratory diseases including asthma, chronic obstructive CC pulmonary disease, cystic fibrosis and adult respiratory distress CC syndrome; liver diseases including hypercholesterolaemia, cirrhosis, CC viral and nonviral hepatitis. Type II diabetes mellitis, and impaired CC glucose tolerance; renal disease including renal failure, acute tubular CC diseases including myotonia congenita and obestry; gastrointestinal CC diseases including lymphagiectasia; diseases of placenta including CC choriocarcinoma; diseases including low testosterone and male for the invention. The present sequence is a colventide of the invention.
                         Query Match
Best Local :
    Matches
                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 90-91; 116pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel polypeptides and polynucleotides useful as a vaccine for preventing and treating diseases associated the polypeptide, e.g. Alzheimer's disease, dyslipidemia, obesity, diabetes, infertility, asthma, ammesias
                                                                                                                           polypeptide of
  Local Similarity es 9; Conserv
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    Conservative
                                                                                                                       the invention.
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Score 47; DB 3
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1: /cgn2_6/ptodata/1,

2: /cgn2_6/ptodata/1,

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164.563 Million cell updates/sec
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/cgn2_6/ptodata/1/iaa/BCTUS_COMB.pep:*
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2 US-08-474-661-34
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2 US-08-611-977-112-8
3 US-08-477-112-8
3 US-09-613-912-112
3 US-09-643-597-112
3 US-08-477-771-2
3 US-08-477-108-4
3 US-08-477-108-4
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3 US-09-363-22-4
3 US-09-363-23-4
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Patent No. 5972886
GENERAL INFORMATION:
                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                     TELEPHONE: (703) 836-6620
TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 6:
                                   FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: MCGOWAN, MAICOLM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 0015
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEFERENCE (703) 836-2021
                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC CONS/MS-DOS
SOFTWARE: Patentin Release #1.0, \
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/611,977
FILING DATE: 06-MAR-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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APPLICANT:
APPLICANT:
APPLICANT:
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       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. 5972886omi
TITLE OF INVENTION: MEAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                           APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: P.O. Box CITY: Alexandria
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5, 5972886
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P.O. Box 1404
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YAMAICHI, Kozo
YAMAGUCHI, NO. 5972886omi
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NAKAZATO, Hiroshi
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ISHIDA, No. S
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US-08-423-691-2
US-08-080-386-4
US-08-390-000A-4
US-08-390-000A-4
US-08-390-000A-4
US-08-348-817A-6
US-09-348-817A-6
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US-09-707-802-3
US-09-991-326-3
US-09-360-237-59
US-09-360-237-59
US-09-707-802-2
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Query Match Best Local S Matches 19

Similarity

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Length 20;

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Conservative

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                                                                                          TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/472,659
FILING DATE: 07-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
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STRANDEDNESS: si-
TOPOLOGY: ''
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: YAMAICHI, KOZO

APPLICANT: YAMAGUCHI, NO. 5831030omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                         APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                         FILING DATE: 14-JUL-1993
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                          NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: P.O. Box CITY: Alexandria
                                             TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                           TELEPHONE:
                                                                             LENGTH:
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                                                                              20 amino acids
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NAKAZATO, Hiroshi
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ISHIDA, No. 5831030uhiro
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Pred. No. 2e-10;
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                                                                                                                                            Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (703) 836-66 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FLOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
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APPLICANT: YAMAGUCHI, NO. 5874253omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 00:
                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Alexandria
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: REA, TERESA STANEK
                                                                                                            19;
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RY: United States
22313-1404
                                                                                                                                         Similarity
ADLSGIASGGRLYISRMMGK 20
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George Mason Bldg., Washington & Prince Sts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IWASA, Fuyuki
TSURUOKA, No. 5874253uo
NAKAZATO, Hiroshi
                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                          SS: single
linear
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                                                                                                                                                                                                                                                                       peptide
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                                                                                                                                     93.9%;
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                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         001560-204
                                                                                                                                     Score 92; DB 2;
Pred. No. 2.1e-09;
                                                                                                         Mismatches
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                                                                                                         Indels
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ADLSGIASGGRLYISRMXGK 20

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RESULT 5
US-08-474-661-34
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                                                 Sequence 34, App. Patent No. 587429
                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                      Query Match
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                               GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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APPLICANT:
APPLICANT:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
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APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: JP 5-
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 14-JUL-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                       LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/UN FILING DATE: 07-JUN-1995
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CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                               Jocal Similarity 95.0%;
les 19; Conservation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
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                                                                                                                                                   305 ADLSGIASGGRLYISRMMHK 324
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                                                               Application US/08474661
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TSUROUOKA, NO. 5831030uo
NAKAZATO, Hiroshi
IWASA, Fuyuki
              TSUJIMOTO, Masafum1
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KURIHARA, Tatsuya
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                                                                                                                                                                                                                  ; Score 90; DB
; Pred. No. 1.6e
0; Mismatches
                                                                                                                                                                                                                                  DB 2;
1.6e-07;
                                                                                                                                                                                                                                                    Length 380
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US-08-611-977-34
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                                                                                                                                                                                                                                                                                                                                  Sequence 34, Applicat Patent No. 5972886 GENERAL INFORMATION:
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2IP: 22313-1404
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy down type:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Flop
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APPLICANT:
APPLICANT:
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REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
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APPLICANT:
APPLICANT:
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SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 17-JUL-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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                                                                                                                 APPLICANT:
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CITY: Alexandria
STATE: Virginia
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STREET: George Mason Bldg., Washington & Prince Sts.
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                                                                                                                                                                                                                                                                                                                                                                                            Application US/08611977
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VENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
KÜRIHARĀ, Tatsuya
YAMAICHI, KOZO
YAMAGÜCHI, NO. 5972886omi
VAMAGÜCHI, NO. 5972886omi
                                                                                                                                                                            MIURA, Kenju
                                                                                                                                                                                                                                                                       IWASA, Fuyuki
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                                                                                                                                                                                                         TSUROUOKA, No. 5972886uo
NAKAZATO, Hiroshi
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NAKAZATO, Hiroshi
                                                                                                                                           ISHIDA, No.
                                                                                                                                                                                                                                                                                                    TSUJIMOTO, Masafumi
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95.0%;
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                                                                                                                                           5972886uhiro
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Pred. No. 1.
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                                     ; ORGANISM: canis
US-09-583-492-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: prot
US-08-611-977-34
                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
   Query Match
                                                                                     SEQ ID NO 10
LENGTH: 327
                                                                                                                                                                                                                                                                                                                                                                   Sequence 10, Application US/09583492
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local
                                                                                                                                                                                         APPLICANT: Cui, Jisong
APPLICANT: Lo, Jane-Ling
APPLICANT: Lo, Jane-Ling
APPLICANT: MOUNT, George R.
TITLE OF INVENTION: DOG GONADOTROPIN RELEASING HORMONE
TITLE OF INVENTION: RECEPTOR
FILE REFERENCE: 20140
CURRENT APPLICATION NUMBER: US/09/583,492
CURRENT FILING DATE: 2000-05-31
                                                                                                                      EARLIER APPLICATION NUMBER: 60/138,448
EARLIER FILING DATE: 2000-06-10
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                     Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: JP 4
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08 FILING DATE: 06-MAR-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      305 ADLSGIASGGRLYISRMMHK 324
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19; Conserv
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SYSTEM: PC-DOS/MS-DOS
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Pred. No. 1.6e-07;
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   Score 46;
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   DB 4;
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Length 327;
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US-08-121-714-8
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                                                            Sequence 8, Applic Patent No. 5801001
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Best Local
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                                GENERAL INFORMATION: APPLICANT: Sager,
                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 09/01/92
APPLICATION NUMBER: 07/844
FILING DATE: 02/28/92
APPLICATION NUMBER: 07/662
APPLICATION UMBER: 07/662
FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
NAME: Errory Tapic K
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/121,714
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: 3.5" Diskette, 50Z or 55SX
   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Sager, Ruth
TITLE OF INVENTION: MASPIN, A NOVEL SERPIN WIT
TITLE OF INVENTION: TUMOR SUPPRESSING ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Fraser, Janis K. REGISTRATION NUMBER: 3
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OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 07
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Boston
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                                                                                                                                                         302 ADLSGMSGARDLFVSKIIHK 321
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                                                                           Application US/08477108A
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zou, zhiqiang
Anisowicz, Anthony
                                                                                                                                                                                                                                                                                                                                                                                                    (617) 542-8906
                                Sager, Ruth
                                                                                                                                                                                                                    Conservative
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Pred. No. 16;
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                                                                                                                                                                                                                    Mismatches
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US-08-477-112-8
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                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 0657
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                             APPLICANT: Sager, Ruth
TITLE OF INVENTION: MASPIN,
TITLE OF INVENTION: TUMOR SI
NUMBER OF SEQUENCES: 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PS/2 Model 502 or 55SX OPERATING SYSTEM: MS-DOS (Version 5.1 SOFTWARE: WORDERIFECT (VERSION 5.1) CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                   COMPUTER READABLE FORM: MEDIUM TYPE: 3.5" Diskette,
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FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08, FILING DATE: June 7, 1995 CLASSIFICATION: 536
                                                                                                                          CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 0 FILING DATE: 09/01/93
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les 8; Conserv
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ZIP: 02110-2804
   OPERATING SYSTEM:
                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH:
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IBM PS/2 Model 50z or 55sx
SYSTEM: MS-DOS (Version 5.0)
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Pred. No. 16;
7; Mismatches
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            ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,
                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/938,823
FILING DATE: 09/01/92
                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: MASPIN, A NOVEL SERPIN WITH TUMOR SUPPRESSING ACTIVITY NUMBER OF SEQUENCES: 8
                                                                APPLICATION NUMBER: 07/
FILING DATE: 02/28/92
APPLICATION NUMBER: 07/
FILING DATE: 02/28/91
                                                                                                                                                                                           FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                COMPUTER: IBM PS/2 Model 502 or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0)
                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
REFERENCE/DOCKET NUMBER:
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Conservative

0

Gaps

0

02110-2804

WordPerfect (Version 5.1)

1.44 Mb

PCT/US93/08322

07/844,296

07/662,216

00530/072001

Boston

225 Franklin Street

Massachusetts

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Query Match
Best Local Similarity
Thehes 8; Conserv
                                                                           US-08-477-112-8
                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                          REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 06:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                 FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 0 FILING DATE: 02/28/91
                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 0:
FILING DATE: 09/01/92
APPLICATION NUMBER: 0:
FILING DATE: 02/28/92
                                                                                                       STRANDEDNESS
                                                                                                                       TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 0: FILING DATE: 09/01/93
                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE:
                                                                                       TOPOLOGY:
                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                    amino acid
                                                                                                                                                                                             (617) 542-8906
                                                                                       linear
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                                                                                                                                                                                                                                                                                                                  07/662,216
                                                                                                                                                                                                                                                                                                                                               07/844,296
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            Score 43; DB Pred. No. 16; 7; Mismatches
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                                          2
                                        Length 375;
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US-09-123-912-110
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                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-123-912-110
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                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. 6312695
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Best Local S
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                                                                                                                                                                                                                                                                 Sequence 110, Application US/09643597
Patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Reed, Steven G.
APPLICANT: Wang, Tongtong
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY OF LUNG CANCER
FILE REFERENCE: 210121.455C1
             CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
                                      APPLICANT: Henderson, Robert A.
APPLICANT: MCNeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 09/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/123,912A
CURRENT FILING DATE: 1998-07-27
                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS:
   NUMBER OF
                                                                                                                   APPLICANT:
                                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 542-5070 TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
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                                                                                                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                                     314 ADYSGMSSGSGLYAQKFL 331
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SEQ
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Similarity 44.4%;
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8; Conserv
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Fan, Liqun
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                                                                                                                                                          Bangur, Chaitanya S.
Hosken, Nancy
Fanger, Gary R.
                                                                                                                  Skeiky,
                                                                                                                                 Wang, Aijun
                                                                                                                                                                                                         Kalos, Michael D.
                                                                                                                                               Li, Samuel X.
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                                                                                                                                                                                                                                                                                                                                                                                                              4;
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 43; DB 4; Length 391; Pred. No. 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 43; DB
Pred. No. 16;
                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                              0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT; ORGANISM: Homo sapien US-09-643-597-110
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US-09-026-408-2
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                                                           Query Match
Best Local S
Matches 8
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SEQ ID NO 110
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Best Local (
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                                                                                                                                                                                                             TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                   FILING DATE: 16-AUG-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/934,011
FILING DATE: 15-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Ni et al TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 36 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1100 NEW CITY: WASHINGTON
                                                                                                                                                                                                                                          TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                               LENGTH:
316 DLSGITDSSEVYVSQVTQK 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314 ADYSGMSSGSGLYAQKFL 331
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                             2 DLSGIASGGRLYISRMMGK 20
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8; Conser
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8; Conserv
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                                                                                                                                                                                                                                                                                                       STEFFE,
                                                                                                                                                              amino acid
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                                                                                                                                                                               392 amino acids
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                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/09/026,408
                                                                                                                                                                                                                                                                                       36,688
                                                                         Score 43;
Pred. No.
                                                                                                                                                                                                                                                                           1488.0300002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 43; DB Pred. No. 17;
                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                           Length 392;
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                                                              Indels
                                                              0,
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                                                              Gaps
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RESULT 15 US-09-123-912-112

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; Sequence 112, Application US/09123912A
; Patent No. 6312695
; GENERAL INFORMATION:
; APPLICANT: Reed, Steven G.
APPLICANT: Reed, Steven G.
APPLICANT: Wang, Tongtong
; TITLE OF INVENTION. COMPOUNDS AND METHODS FOR THERAPY OF LUNG CANCER
; FILE REFERENCE: 210121.45SC1
; CURRENT APPLICATION NUMBER: US/09/123,912A
; CURRENT FILING DATE: 1998-07-27
; PRIOR APPLICATION NUMBER: 09/040,802
; PRIOR FILING DATE: 1998-07-18
; NUMBER OF SEQ ID NOS: 114
; SOFTWARR: Patentin Ver. 2.0
; ED NO 112
; SEQ ID NO 112
; CRANISM: Homo sapiens
US-09-123-912-112

Query Match
Best Local Similarity 44.4%; Pred. No. 17;
Matches 8; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QU 1 ADLSGIASGGRIYISHMM 18

QY 1 ADLSGIASGGRIYISHMM 18

Ob 323 ADYSGMSSGSGLYAQKFL 340

Search completed: July 11, 2003, 12:02:09

Job time: 4.57588 secs
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Title: Perfect score: Sequence:

US-10-091-442-6 98 1 ADLSGIASGGRLYISRMMGK

20

Scoring table:

BLOSUM62

Gapop 10.0 ,

Gapext 0.5

OM protein - protein search, using sw model

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd

July 11, 2003, 11:59:17; Search time 5.86279 Seconds (without alignments)
397.148 Million cell updates/sec

9

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Published_Applications_AA: *

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/cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
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3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
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/cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

Minimum DB seq

length: 0 length: 2000000000 Total number of hits satisfying chosen parameters:

445758

Searched:

445758 seqs,

116419773 residues

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RESULT 1
US-10-091-442-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/10091442
Patent No. US20020164711A1
GENERAL INFORMATION:
APPLICANT: TSUJIMOTO, Masafu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Si
STREET: P.O. Box 1404
CITY: Alexandria
STATE: Virginia
COUNTAX: United States
LIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                              COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PATENTIN FR-EASE #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <UNknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MIURA, Kenju
ISHIDA, NO. US20020164711Aluhiro
KURIHAR, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, KOZO
YAMAGUCHI, NO. US20020164711Alomi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                 APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSUROUOKA, No. US20020164711Aluo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IWASA, Fuyuki
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0 US-09-925-301-1200
US-09-975-719-333
US-10-091-504-679
0 US-09-729-674-134
0 US-09-764-898-169
0 US-09-784-898-169
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0 US-09-93-180-3
0 US-09-93-8418-947
0 US-09-955-814-947
0 US-09-955-814-947
0 US-09-754-016-5
0 US-09-754-016-5
0 US-09-754-016-5
0 US-09-754-016-5
0 US-09-754-016-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Swecker & Mathis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13, Appl Sequence 33, App Sequence 679, App Sequence 169, App Sequence 164, App Sequence 946, App Sequence 946, App Sequence 67, Appl Sequence 67, Appl Sequence 70, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl Sequence 14, Appl Sequence 19, Appl Sequence 19, Appl Sequence 19, Appl Sequence 19, Appl Sequence 947, App Sequence 947, Ap
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Result No.

Match

Length

BB

Description

US-10-091-442-6 US-09-140-719-6 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

20 380 380 395 307 377 377 391 391 400 400

US-10-091-442-34
US-09-823-1872-2
US-09-823-1872-2
US-09-738-626-6331
US-09-738-626-6331
US-10-165-605A-27
US-09-10-430-27
US-09-466-396A-110
US-09-466-396A-110
US-09-850-716A-110
US-09-850-716A-112
US-09-850-716A-112
US-09-850-716A-112
US-09-850-716A-112
US-09-850-716A-112
US-09-850-716A-112

Sequence 6, Appli
Sequence 34, Appli
Sequence 34, Appli
Sequence 2, Appli
Sequence 23, Appli
Sequence 133, App
Sequence 119, App
Sequence 27, Appl
Sequence 110, App
Sequence 110, App
Sequence 110, App
Sequence 111, App
Sequence 112, App

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US-09-140-719-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6, Application US/09140719 Patent No. US20010026931A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 6:
                                                                    FILING PATE: JP 4-212305
APPLICATION NUMBER: JP 4-212305
FTITING DATE: 17-JUL-1992
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: MCGOWAN, MALCOLM K
                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-
FILING DATE: 04-MAR-1993
                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
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                                                                                                                                  APPLICATION NUMBER: US 0 FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 08-AUCCLASSIFICATION:
                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                           SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                            ?Y: United States
22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                            Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADLSGIASGGRLYISRMMGK 20
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                                                                                                                                                                                                                                                                                                                                                                                                                          Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 20 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Burns, Doane, Swecker & Mathis
P.O. Box 1404
                                                                                                                                                                                                                                                                                                      PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TSUROUCKA, No. US20010026931A1uo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YAMAGUCHI, No. US20010026931A1omi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KURIHARA, Tatsuya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                        08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                   JP 6-067339
                                                                                                                                                  US 08/091,028
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 98; I
Pred. No. 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ه</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEBAX: (703) 0... 6:
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
FRIGHH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 34, Application US/10091442
Patent No. US20020164711A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
                   TELECOMMUNICATION INFORMATION
                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                       CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doa
STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KURTHARA, Tatsuya
YAMAICHI, KOZO
YAMAICHI, KOZO
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: TSUJIMOTO, Masafumi
                                                                                                                                                 APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Alexandria
STATE: Virginia
   TELEPHONE:
                                      REFERENCE/DOCKET NUMBER: 001560-247
                                                        REGISTRATION NUMBER: 39,300
                                                                                                                APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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linear
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                                                                           McGowan, Malcolm K.
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ISHIDA, No. US20020164711Aluhiro
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NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             [WASA, Fuyuki
(703)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No. US20020164711Aluo
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RESULT 4
US-09-140-719-34
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Patent No. U
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL
TELEFAX: (703) 836-202
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                     APPLICATION NUMBER: US 01
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
US 08/091,028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                            NAME: MGGOWAN, MAICOLM K.
REGISTRATION NUMBER: 39,300
REGERENCE/DOCKET NUMBER: 00:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                        APPLICATION NUMBER: JP 4-FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US UN PILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: P.O. Box CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER:
                                                                                                                                                               APPLICATION NUMBER: JP 6 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                305 ADLSGIASGGRLYISRMMHK 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ADLSGIASGGRLYISRMMGK 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Burns, Doane, Swecker & Mathis
P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KÜRIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. US20010026931A10mi
YAMAGUCHI, NO. US20010026931A10mi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MIURA, Kenju
ISHIDA, No. US20010026931Aluhiro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IWASA, Fuyuki
TSUROUOKA, No. US20010026931Aluo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                                         PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                        IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                        08-AUG-1998
                                             836-2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91.8%;
95.0%;
                                                                                                                                                                                                                                                                                                                           US 08/474,661
                                                                                                                                                                              JP 6-067339
                                                                                                                                                                                                                             JP 4-212305
                                                                                               001560-247
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Pred. No. 2e-06;
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; LENGTH: 395
; TYPE: PRT
; ORGANISM: Homo s
US-09-823-187-2
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Best Local :
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CURRENT FILING DATE: 2001-03-29
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TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
FILE REFERENCE: 15966-745
                                                                                                                                                                                                                                              PRIOR FILING DATE:
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PRIOR FILING DATE: 2000-04-05
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es 19; Conservat
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                                                       Similarity
9; Conserv
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Shimkets, Richard A
Spaderna, Steven K
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Padigaru, Muralidhar
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Pred. No. 2e-06;
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Pred. No. 14;
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RESULT 6
US-09-738-626-6331
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APPLICANT:
                                                                                                                    TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification, TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer FILE REFERENCE: MRI-030
CURRENT APPLICATION NUMBER: US/10/097,340
CURRENT FILING DATE: 2002-03-14
PRIOR APPLICATION NUMBER: 60/276,025
PRIOR FILING DATE: 2001-03-14
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APPLICANT:
APPLICANT:
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                                                  PRIOR APPLICATION NUMBER: 60/325,149
PRIOR FILING DATE: 2001-09-26
PRIOR APPLICATION NUMBER: 60/276,026
PRIOR FILING DATE: 2001-03-14
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PRIOR APPLICATION NUMBER: JP 99/377484
PRIOR FILING DATE: 1999-12-16
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CURRENT FILING DATE: 2000-12-18
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TYPE: PRT
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nes 9; Conserv
              FILING DATE: 2001-03-14
APPLICATION NUMBER: 60/324,967
FILING DATE: 2001/09/26
APPLICATION
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                                                                                                                                                                                                                                                     Karen GLATT
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Rachel E. MEYERS
Michael MORRISEY
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SENOH, AKIHIRO
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Robert C. BAST, Jr.
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Shubhangi KAMATKAR
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US-10-165-605A-27
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; LENGTH: 379
; TYPE: PRT
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                                                                                                                                                                                         Patent No. US20020127235A1
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                                                    APPLICANT: Godfroi, Edmond
APPLICANT: Bollen, Alex
APPLICANT: Leboulle, Gerard
TITLE OF INVENTION: IDENTIFICATION AND MOLECULAR CHARACERIZATION OF
TITLE OF INVENTION: PROTEINS, EXPRESSED IN THE IXODES RICINUS SALITITLE OF INVENTION: GLANDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/BE00/00061
PRIOR FILING DATE: 2000-06-06
PRIOR APPLICATION NUMBER: GB9913425.6
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APPLICANT: Bollen, Alex
APPLICANT: Leboulle, Gerard
TITLE OF INVENTION: IDENTIFICATION AND MOLECULAR CHARACERIZATION OF
TITLE OF INVENTION: PROTEINS, EXPRESSED IN THE IXODES RICINUS SALIVARY
TITLE OF INVENTION: GLANDS
TITLE OF INVENTION: GLANDS
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SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION NUMBER: US/09/910,430 CURRENT FILING DATE: 2001-07-19
                                       FILE REFERENCE: VANM229.001CP1
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2001-09-26
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Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens US-10-157-031-355
                                               US-09-466-396A-110
                                                                                                                                                                                                                                                                                                US-09-466-396A-110
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 8
                                                      CURRENT APPLICATION NUMBER: US/09/466,396A
CURRENT FILING DATE: 199-12-17
NUMBER OF SEQ ID NOS: 224
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 110
LENGTH: 391
TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                                                                                                                  Sequence 110, Application US/09466396A
Publication wo. US20030119763A1
GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/157,031
CURRENT FILING DATE: 2002-05-30
NUMBER OF SEQ ID NOS: 415
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 355
LENGTH: 391
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 27
LENGTH: 377
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Best Local Similarity
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Query Match
Best Local Similarity
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                                                                                                                                                                                      TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY AND TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER FILE REFERENCE: 210121.455C4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Lobashev, A. V.

APPLICANT: Krukovskaya, L. L.

TITLE OF INVENTION: In silico screening for phenotype-associated expressed sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: GB PRIOR FILING DATE: 1999-06-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PCT/BE00/00061 PRIOR FILING DATE: 2000-06-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 2760-103
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mes 8; Conserv
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Kozlov, A. P.
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b. US20030108890A1
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50.0%;
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43.98;
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Pred. No.
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Pred. No.
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Pred.
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N 43
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; TYPE: PRT
; ORGANISM: Homo sapien
US-09-735-705-110
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                                                                                                 ; ORGANISM: Homo sapien US-09-850-716A-110
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                                                                                                                           SEQ ID NO 110
LENGTH: 391
TYPE: PRT
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                                Best Local Similarity 44.4%; Pred. No. Matches 8; Conservative 4....
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                            APPLICANT: Kalos, Michael D.
APPLICANT: McNeill, Patricia D.
APPLICANT: Retter, Marc W.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C15
                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/850,716A
CURRENT FILING DATE: 2001-05-07
NUMBER OF SEQ ID NOS: 440
SOFTWARE: FastSEQ for Windows Version 3.0
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les 8; Conserv
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1 ADLSGIASGGRLYISRMM 18
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Fan, Liqun
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Li, Samuel X.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43.98;
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Pred. No.
                                           Mismatches
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61;
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                                                                      Length 391;
                                           Indels
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ADYSGMSSGSGLYAQKFL 331

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RESULT 15
US-09-902-684-2
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 110
LENGTH: 391
TYPE: PRT
ORGANISM: Homo sapiens
US-09-897-778-110
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Patent No. US20020127640A1
GENERAL INFORMATION:
APPLICANT: Ni et al.
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Best Local Similarity 44.4%;
Matches 8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Henderson, Robert A.
APPLICANT: Peckham, David W.
APPLICANT: Fanger, Neil
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C16
CURRENT APPLICATION NUMBER: US/09/897,778
CURRENT FILING DATE: 2001-06-28
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                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/902,684
FILING DATE: 12-Jul-2001
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
                                                     APPLICATION NUMBER: 09/026,408
FILING DATE: <UNKNOWN>
APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 15
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NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0300002
                                                                                                                                                                                                                                                                                                                                                                                                       CITY: WASHINGTON
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADLSGIASGGRLYISRMM 18
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Vedvick, Thomas S.
Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Watanabe, Yoshihiro
Henderson, Robert A.
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Marnerakis, Margarita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR
                                                                                                                                                                                                                                                                                                                                                                                     USA
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TOPOLOGY: Inear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-902-684-2
Search completed: July 11, 2003, 12:37:33 Job time: 5.86279 secs
                                                                                                     Query Match
Best Local Similarity
Whiches 8; Conserve
                                                           밁
                                                                                     γQ
                                                                                                                                                                                                                                                                               TELEPHONE: 202-371-260
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                        316 DLSGITDSSEVYVSQVTQK 334
                                                                                     2 DLSGIASGGRLYISRMMGK 20
                                                                                                                                                                                                                                    LENGTH: 392 amino acids
TYPE: amino acid
                                                                                                                   43.9%;
ilarity 42.1%;
Conservative
                                                                                                                   4
                                                                                                                   Score 43; DB Pred. No. 61; 4; Mismatches
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                                                                                                                                             10; Length 392;
                                                                                                                 Indels
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Minimum DB :
Maximum DB :
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                43.44
44.5
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Match
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Gapop 10.0 , Gapext 0.5
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98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   283224 segs, 96134422 residues
PIR_73:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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pir2:*
pir3:*
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B72528
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G81719
G71565
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A75474
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                                                                                                   hypothetical prote similar to late em DNA-directed DNA p phosphate transpor leukocyte elastase headpin serine pro probable nucleolar hypothetical prote
      signal peptidase, probable signal pe conserved hypothet probable ribosome-histone deacetylase deacetylase (impor sulfate ABC transp hypothetical prote elastase inhibitor soxil transcriptio
                                                                                                                                                                       hypothetical prote cobyrinic acid a.c conserved hypothet probable phosphose conserved hypothet conserved hypothet hypothetical prote
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serine proteinase,
hypothetical prote
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protein C inhibito
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RESULT 2 A75474 serine pro C; Species: C; Date: 03 C; Accessio R; White, 0 K; Shen S; Smith, Science 28 A; Title: G A; Referenc A; Accessio A; Status: A; Molecule A; Residues A; Cross re C; Genetics A; Map posi	RESULT 1 S49162 ZG-21p pro C; Species: C; Date: 16 C; Accessio R; Cronshag submitted A; Descritet A; Referenc A; Accessio A; Status: A; Molecule A; Residues A; Cross ree C; Superfam Query Ma Best Loc Matches Oy Db	33 33 33 33 33 33 33 33 33 33 33 33 33
proteinase, subtilase family - Deinococcus radioduran ies: Deinococcus radiodurans: 103-Dec-1999 #sequence_revision 03-Dec-1999 #text_cha ssion: A75474 ssion: A75474 ssion: A75474 ssion: A75474 ssion: A75474 ssion: A75476 11th, H.O.; Venter, J.C.; Fraser, C.M. 206. 1571-1577, 1999 e: Genome sequence of the radioresistant bacterium Dei rence number: A75250; MUID:20036896; PMID:10567266 us: preliminary cule type: DNA dues: 1-991 AWHID CHAPPER CONTROL OF CONTROL	protein - rat es: Rattus norvegicus (Norway rat) 16-Feb-1995 *sequence_revision 12-May-1995 *text_change slon: S49162 hagen, U.; Chen, C.; Kern, H.F. ed to the EMBL Data Library, March 1994 iption: A novel protein expressed exclusively in pancreas ence number: S49162 sion: S491	42 42.9 700 2 D75508 42 42.9 740 2 T45091 42 42.9 1288 2 T09908 41 41.8 378 2 S38962 41 41.8 383 2 S11433 41 41.8 387 2 I39184 41 41.8 397 2 I39184 41 41.8 43 1 ITHUC 41 41.8 43 1 ITHUC 41 41.8 43 2 A72358 41 41.8 48 2 C86336 41 41.8 48 2 T05679 41 41.8 48 2 T05679 41 41.8 48 2 T05838 41 41.8 48 2 C 2 A31886 41 41.8 48 2 C 2 A31886 41 41.8 513 2 C34138 41 41.8 513 2 A33281
s (strain R1) nge 31-Mar-2000 terson, J.D.; Dodson, R.J erback, T.; Zalewski, C.; nococcus radiodurans R1.	21-Jan-2000 1s proposed to be a (1D:g510194 0; Gaps 0;	serine/threonine p Cattalase (EC 1.11. hypothetical prote ovalbumin - Japane hypothetical prote bomapin - human . contrapsin precurs alpha-1-antichymot conserved hypothet hypothetical prote H+-transporting tw H+-transporting tw H+-transporting tw H+-transporting tw H+-transporting tw H+-transporting tw

Query Match
Best Local Similarity
Matches 8; Conserv

Conservative

49.08; 47.18;

; Score 48; DB; Pred. No. 9.1; 6; Mismatches

DB 9.1; 2

Length 591; Indels

0;

Gaps

0

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A;Cross-references: GB:M68516; GB:M64881; NID:g189677; PIDN R;Meijers, J.C.M.; Chung, D.W. Thromb. Res. 59, 389-393, 1990

A;Title: Evidence for a glycine residue at position 316 in A;Reference number: A37341; MUID:91048502; PMID:2173165

A;Accession: A37341

A;Status: preliminary; nucleic acid sequence not shown; not A;Molecule type: DNA

A;Residues: 331-341 (MEIZ>
A;Residues: 1334, "R; 336-406 (SUZ>
A;Residues: 1334, "R; 336-406 (SUZ>
A;Cross-references: GB:J02639; NID:g180549; PIDN:AAA35688.1

R;Reditke, K.
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N;Alternate names: GP43; plasminogen activator inhibitor 3 precursor (PAI3);
C;Species: Homo sapiens (man)
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 20-Jun-2000
C;Accession: A39339; A37341; A26139; G02081; A60434; A60462; S41213; T12502;
R;Meijers, J.Chung, DM.
J. Biol. Chem. 266, 15028-15034, 1991
A;Title: Organization of the gene coding for human protein C inhibitor (plasm A;Reference number: A39339; MUID:91332018; PMID:1714450
A; Reference number:
A; Accession: G02081
A; Status: translate
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A;Authors: Kaine, B.P.; Borodovsky, M.; Klenk, H.P.; Fraser, C.M. A;Title: Complete genome sequence of the methanogenic archaeon, A;Reference number: A64300; MUID:96337999; PMID:8688087
A;Accession: B64302
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C;Accession: B64302
R;Bult, C.J.; White, O.; Olsen, G.J.; Zhou, L.; Fleischmann, R.D.; Sutton, G.G.; Blab; Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, R.; Kirkness, E.F.; Weinstock, K.G.; Weinstock, K.G.; Merrick, J.M.; Glodek, R.; Kirkness, E.F.; Weinstock, K.G.; W
                                                                submitted to the EMBL Data Library, A; Reference number: H00782
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A; Residues: 1-406 <MEI1>
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A; Residues: 1-524 <B
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C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 22-Oct-1999
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C;Species: M
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Methanococcus jannaschii
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7; Conserv
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41.2%;
                                                                                                                                                                   <$UZ>; NID:g180549; PIDN:AAA35688.1;
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dek, A.
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                            A; Experimental C; Genetics:
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Best Local
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A; Molecule type: DNA
A; Residues: 1-957 <BEV>
                                                                                       A; Reference number: A; Accession: T10633
                                                                                                                                  R;Bevan, M.; Pohl, T.; Weizenegger, T.; Bandsubmitted to the Protein Sequence Database,
                                                                                                                                                                                 C;Date: 16-Jul-1999 #sequence_revision
C;Accession: T10633
                                                                                                                                                                                                                              hypothetical protein T13K14.70 - Arabidopsis thaliana C; Species: Arabidopsis thaliana (mouse-ear cress)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Note: DKFZp434P131.1
C; Superfamily: antithrombin III
C; Keywords: glycoprotein; monomer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Map position: 14q32.1-14q32.
A; Introns: 207/1; 297/2; 346/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:AL080185; NID:g5262662; PIDN:CAB45766.1; PID:g5262663 A;Experimental source: adult testis; clone DKFZp434P131 C;Comment: Inhibits protein C (see PIR:KXHU) and plasminogen activator (see PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   submitted to the Protein Sequence A; Reference number: Z17525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: protein A;Molecule type: protein A;Residues: 29-38,'X',40-44,'XX',47-50,'X',52;377,'X',379-398,'X',400 R;Poustka, A.; Klein, M.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eur. J. Blochem. 220, 45-53, 1994
A;Title: Complex formation between protein C inhibitor and A;Reference number: S41212; MUID:94164172; PMID:7509746
A;Accession: S41213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Note: this protein was found to R; Christensson, A.; Lilja, H. Eur. J. Biochem. 220, 45-53, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Mizuta, K.; Yasuda, T.; Kishi, K.
Biochem. Genet. 27, 731-743, 1989
A;Title: Biochemical and genetic studies of
A;Reference number: A60462; MUID:90179688;
                       A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Cross-references: GDB:134739;
A; Map position: 14q32.1-14q32.1
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A; Residues: 'E', 29-406 < POU>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thromb. Haemost. 62, 885-891, 1989 A; Title: Protein C inhibitor from J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
A; Residues: 1-54,'V',56-104,'E',106-406 <RAD>
A; Cross-references: EMBL: 035464; NID: 91144560;
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  source:
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EMBL:AL080282; GSPDB:GN00062; ATSP:T13K14.
De: cultivar Columbia; BAC clone T13K14
                                                                                                                 Z16991
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45.0%;
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Pred. No.
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PMID:2627198
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19;
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                                                                                                                                                            H.W.; Mayer, K.F.X.;
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C:Accession: D69804

C:Accession: D69804

R:Kunst, F.; Ogsaswara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berter C.; Bron, S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Chd A.; Ehrlich, S.D.; Emmerson, P.T.; Entlan, K.D.; Errington, J.; Fabret, C.; Ferrari, E. Nature 390, 249-256, 1997

A:Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Galler iech, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holsappel, S.; Hosono, S.; Hullo, M.F. Koetter, P.; Koningstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardinois, A.; Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Maueel Y. M.; Ogsawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetellé Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon, A: Authors: Schletch, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Seror akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpstra, P.; Tognoni, A.; Tosato, V.; Uchiyama, T.; Wilters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, K.; A; Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A.
A; Title: The complete genome sequence of the Gram-positive bacterium Bacillus subtilis. A; Accession: D69804
A; Accession: D69804
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A:Introns: 84/3; 115/2; 133/1; 280/2; 365/2; 682/1; 732/3; 771/3; 4
C:Superfamily: Arabidopsis thaliana hypothetical protein Tl3K14.70
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C36144
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J. Bacteriol. 172, 5968-5979, 1990
A;Title: Nucleotide sequence of secudomonas denitrificans 5.4-kilobase DNA fragment
en III methyltransferase and cobyrinic acid a,c-diamide synthase.
A;Reference number: A36144; MUID:91008975; PMID:2211520
A;Accession: C36144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          conserved hypothetical protein yfik - Bacillus subtilis
C:Species: Bacillus subtilis
C:Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 15-Oct-1999
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                                                                                                                                            A;Cross-references: GB:299108; GB:AL009126; NID:g2633055; PIDN:CAB12666.1; PID:e1182827
A;Experimental source: strain 168
                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-205 <KUN>
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A; Residues: 1-434 <CRO>
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Local Similarity 45.0%;
es 9; Conservation
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        38.98;
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Pred. No. 46;
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Pred. No. 24;
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        N 4
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14;
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conserved h
C; Species:
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AF1198
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R; nawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Ta awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J. DNA Res. 6, 83-101, 1999
A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aero A; Reference number: A72450; MUID:99310339; PMID:10382966
A;Accession: C72657
                                                                                                                                                                                                                                                       R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; F.; Jones, L.M.; Karst, U.; Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J. A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;A;Accession: AD1556
                                                                                                                                                                                                                                                                                                                                                                                             A; Decube type: DNA
A; Molecule type: DNA
A; Residues: 1-222 <KAW>
A; Cross-references: DDB:AP000060; NID:g5104188; PIDN:BAA79659.1;
                                                                                                                                                      A; Experimental source: C; Genetics:
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C; Superfamily: phosphoserine phosphatase
В
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A;Molecule type: DNA
A;Residues: 1-453 <GL/
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C; Species: Listeria innocua
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C;Accession: C72657
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8; Conserv
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9; Conserv
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                                                                                                                                                                                        GB:AL592022; PIDN:CAC96220.1; PID:g16413448; GSPDB:GN00178
                                                                                                                                                                      strain Clip11262
                                                                                 44.98;
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75.0%;
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Pred. No.
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Fsihi,
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hypothetical protein lmo0990 Listeria monocytogenes

[imported] -

Listeria monocytogenes

(strain

C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 27-Nov-2001 C;Accession: AF1198
R;Glaser, P; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche,

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A;Introns: 72/3; 105/3; 257/2; 328/2; 635/1; 685/3; 724/3
C;Superfamily: Arabidopsis thaliana hypothetical protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: EMBL:AL080282; GSPDB:GN00062; ATSP:T13K14.80 A;Experimental source: cultivar Columbia; BAC clone T13K14 C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      submitted to the Protein S
A; Reference number: Z16991
A; Accession: T10634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein T13K14.80 - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 18-Aug-2000 C;Accession: T10634
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A; Residues: 1-453 <GLA>
A; Cross-references: GB: NC_003210; PIDN: CAC99068.1;
A; Cross-references: Strain EGD-e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D; Jones, L.M.; Karst, U.
Science 294, 849-952, 2001
A; Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, A; C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.
A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AF1198
                                                 A;Accession: T02712
A;Status: translated from GB/EMBL/DDBJ
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A; Residues: 1-870 <BEV>
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     A; Residues: 1-1805
A; Cross-references:
                                  A; Molecule type: DNA
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EMBL: AC005313; NID: g3548797; PID: g3548816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sizenegger, T.; Bancroft, I.;
Sequence Database, June 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L.; Buchrieser, C.; Amend, Duchaud, E.; Durand, L.;
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Voss, H.; Wehland
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Fsihi, H.
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                 A; Molecule type: DNA
A; Residues: 1-371 <STO>
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A; Experimental source: cultivar Columbia R; Lin, X.; Kaul, S.; Rounslev. C., M.; Koo, H.: Mofer.
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A;Cross-references: GB:AE002093; NID:g3548816; PIDN:AAC34488.1; GSPDB:GN00139
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                             R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; Vanaken, S.E.; Umayam, L.; Tallon, euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.D.; Fraser, C.M.; Venter Nature 402, 761-768, 1999
                                                                                                                                                                                             A; Gene: T18E12.19; At2g03140
A: Map position: 2
                                                                                                                                                                                                                                                                                                                                                 A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana. A;Reference number: A84420; MUID:20083487; PMID:10617197 A;Accession: G84444
                                                                                                                                                                        A; Introns: 249/2; 341/3; 403/3; 451/1; 611/3; 1414/3;
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A; Residues: 1-1805 <
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  70
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11; Conserv
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88
                                                                                                         Score 43.5;
Pred. No. 1
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1.5e+02;
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Gene 93, 73-78, 1990
A; Title: Structure of the dnaA region of Micrococcus luteus:
A; Reference number: JQ0737; MUID:91033019; PMID:2172090 C; Keywords: A; Molecule type: DNA A; Residues: 1-310 <FUJ> R; Fujita, M.Q.; C; Date: 10-Mar-1994 #sequence_revision DNA-directed DNA polymerase (EC 2.7.7.7) III beta chain - Micrococcus luteus C; Species: Micrococcus luteus, Micrococcus lysodeikticus A;Gene: dnaN A;Cross-references: GB:M34006; NID:g149845; PIDN:AAA25316.1; PID:g149849 A; Status: preliminary A; Accession: JQ0740 Superfamily: DNA-directed DNA polymerase III beta chain; Reywords: DNA replication initiation; nucleotidyltransf Accession: JQ0740 Local Similarity les 9; Conserv 220 ADLVGFASGGR ADLSGIASGGR 11 Yoshikawa, H.; Ogasawara, Conservative 43.9%; 230 0; Mismatches Score 43; Pred. No. 10-Mar-1994 #text_change nucleotidyltransferase z 2 ? Length 310 Indels conservation and 0; 0 (fragmen

G84398

phosphate transporter permease [imported] - Halobacterium sp. NRC-1
C;Species: Halobacterium sp. NRC-1
C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 02-Feb-2001

R;Ng, W.V.; Kennedy, S.P.; Mahairas, G.G.; Berquist, B.; Pan, M.; Shukla, H.D.; Lasky; Leithauser, B.; Keller, K.; Cruz, R.; Danson, M.J.; Hough, D.W.; Maddocks, D.G.; Ja Jung, K.H.; Alam, M.; Freitas, T.
Proc. Natl. Acad. Sci. U.S.A. 97, 12176-12181, 2000
A;Authors: Hou, S.; Daniels, C.J.; Dennis, P.P.; Omer, A.D.; Ebhardt, H.; Lowe, T.M.; A;Title: Genome sequence of Halobacterium species NRC-1.
A;Reference number: A84160; MUID:20504483; PMID:11016950

A; Status: preliminary A; Accession: G84398

A; Cross-references: GB:AE004437; NID:g10581881; PIDN:AAG20555.1; GSPDB:GN00138

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N;Alternate names: plasminogen activator inhibitor-2 homolog
C;Species: Equus caballus (domestic horse)
C;Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 02-Jun-2000
C;Accession: A4242; A37276; S34062
R;Dubin, A.; Travis, J.; Enghild, J.J.; Potempa, J.
J. Biol. Chem. 267, 6576-6583, 1992
A;Title: Equine leukocyte elastase inhibitor. Primary structure and identification as A;Reference number: A42421; MUID:92202200; PMID:1551869
A;Accession: A42421
                                                                                                                                                                                                                                                                                                 A;Cross-references: GB:M91161; NID:g164240; PIDN:AAA97513.1; PID:g164241 C;Superfamily: antithrombin III C;Keywords: serine proteinase inhibitor
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A;Gene: pstCl
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Search completed: July 11, 2003, 12:00:39 Job time: 5.13326 secs
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A;Residues: 1-41,'E',43-325,'VD',326-379 <DUB2>
R;Residues: 1-41,'E',43-325,'VD',326-379 <DUB2>
R;Rordula, T; Dubin, A; Schooltink, H; Koj, A; Heinrich, P.C.; Rose-John, S.
Biochem. J. 293, 187-193, 1993
A;Title: Molecular cloning and expression of an intracellular serpin: an elastase inhibi
A;Reference number: S34062; MUID:93319507; PMID:7687128
A;Accession: S34062
                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-379 < KOR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: PIDN:AAB21885.1; PID:g247842
A;Experimental source: leukocyte
A;Experimental source: leukocyte
A;Duble: sequence extracted from NCBI backbone (NCBIP:89849)
R;Dubin, A.; Travis, J.; Enghild, J.J.; Potempa, J.
Submitted to the Protein Sequence Database, December 1991
A;Reference number: A37276
A;Accession: A37276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             leukocyte elastase inhibitor - horse
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Similarity 40.0%;
8; Conservative
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Pred. No. 37;
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OVAL_COTJA
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SB11_HUMAN
SB10_HUMAN
HP55_TAMSI
COTR_MOUSE
AACT_HOUSE
AACT_HOUSE
AACT_HOUSE
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SAL1_MOUSE
PSTA_RHILO
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SPI2.HUMAN
SPI3.HUMAN
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COBB_PSEDE
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SBI3.HUMAN
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P051182
P2117830
075830
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059557
P069557
P070719
P19104
043433
096p74
098f14
099f174
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9 methanococc
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1 mus musculu
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1 mycobacteri
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gossypium h
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hordeum vu
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micrococcus
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bos taurus
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15-JUN-2002 (Rel. 41, L
15-JUN-2002 (Rel. 41, L
Megsin (TP55) (Serpin B
                                                                                                                                                               "A mesangium-predominant gene, megsin, is a new serpin upregulated 194 nephropathy.";
J. Clin. Invest. 102:828-836(1998).
J. Clin. Invest. 102:828-836(1998).
II FUNCTION: Might function as an inhibitor of Lys-specific proteases. Might influence the maturation of megakaryocytes via its action as a serpin.
Its action as a serpin.
Its SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
ITSSUB SPECIFICITY: Predominantly expressed in mesangial cells.
ITSSUBLARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                       EMBL; D88575; BAA31232.1; -. EMBL; AF027866; AAC64506.1; HSSP; P05619; 1HLE.
                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-slb.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
TISSUE-Mesangial cells;
MEDLINE-98376492; PubMed-9710452;
Miyata T., Nangaku M., Suzuki D.,
Okubo K., Kurokawa K.;
                                                                                                                                                                                                                                                                                                               J. Biol.
[2]
                                                                                                                                                                                                                                                                                                                     MEDIJINE-97326116; PubMed-9182567;
Tsujinoto M., Tsuruoka N., Ishida N., Kurihara T., Twasa F.,
Yamashiro K., Rogi T., Kodama S., Katsuragi N., Adachi M.,
Katayama T., Nakao M., Yamaichi K., Hashino J., Haruyama M., Miura K.,
Nakanishi T., Nakazato H., Teramura M., Mizoguchi H., Yamaguchi N.;
"Purification, cDNA cloning, and characterization of a new serpin with
megakaryocyte maturation activity.";
J. Biol. Chem. 272:15373-15380(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Megsin (
Pfam; PF00079; serpin; : SMART; SM00093; SERPIN; PROSITE; PS00284; SERPII
                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBI_TaxID=9606;
                                      Genew; HGNC:
MIM; 603357;
                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                             InterPro; IPR000215; Serpin
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
                                                HGNC:13902;
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Last sequence update)
Last annotation update
B7)
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GRHR_FIG
GRHR_FIG
PTIG_MOUSE
DCDA_AQUAE
VATB_TRYCO
VATB_DROME
VATB_CAEEL
VATB_CAEEL
VATB_CAEAT
VAB2_ACEAT
VAB2_ACEAT
VATB_HELVI
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Inagi R., Uragami K.,

Sakai

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PRT;

380 ₿ ALIGNMENTS

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equus sus sc

us cabal

A mus musculu
aquifex aeo
gallus gall
trypanosoma
drosophila
caenorhabdi
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RESULT
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MEDLINE-21085660; PubMed-11217851;

RA MEDLINE-21085660; PubMed-11217851;

RA Mara J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,

RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Casavant T.,

RA Alzawa K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Cochiwa H.,

Ra Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Staubi F., Szuki R., Tomita M., Wagner L., Washio T.,

RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

Ra Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

RA Barswastelin M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,

RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,

Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,

RA Mordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,

RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,

RA Wanshaw-Roris A., Yoshida K., Hascorawa Y. Kawait H., Kohteniyi S.
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ACT_SITE
SEQUENCE
 EMBL;
EMBL;
HSSP;
                                                                                      the European Bioinformatics Institute. There are no rest use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entitles requires a license agreement (See http://www.isb-or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                           Nature 409:685-690(2001).
-!- SUBCELLULAR LOCATION: Secreted (Probable).
-!- TISSUE SPECIFICITY: Expressed in pancreas.
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Serpin I2 precursor (Serine protease inhibitor 14).
SERPINI2 OR SPI14.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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SPI2_MOUSE
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AF251276; AAF65821.1; -. AK007347; BAB24976.1; -. AK007510; BAB25079.1; -. P01008; IATH.
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95.0%;
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                                                                                                                                                                                                                                                                                                                        cDNA collection.";
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Query Match

Score 51;

DB 1;

Serpin; Serine protease inhibitor.
ACT_SITE 343 344 REACT
SEQUENCE 378 AA; 42560 MW; 664

REACTIVE BOND (BY SIMILARITY).
664F499CCFCE263A CRC64;

PROSITE;

PS00284; SERPIN;

SERPIN; 1.

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RESULT 3
PTI6_BUYIN
ID PTI6_BU
AC 002739
AC 002739
AC 002739
DT 30-MAY
DT 15SUE
RN 16101
RP 16101
RP 16101
CC -1- TI
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SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                          Brain Res. Mol. Brain Res. 42:293-300(1996).

-!- FUNCTION: MAY BE INVOLVED IN THE REGULATION OF SERINE PROTEINASES
-!- PRESENT IN THE BRAIN OR EXTRAVASATED FROM THE BLOOD.
-!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
-!- TISSUE SPECIFICITY: BRAIN.
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                       use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nakaya N., Nishibori M., Kawabata M., Saeki K.; "Cloning of a serine proteinase inhibitor from bovine brain expression in the brain and characterization of its target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             002779;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation updat
                                                                                             Pfam; PF00079; serpin; 1
SMART; SM00093; SERPIN; 1
                                                                                                                                                            EMBL; D55670;
HSSP; P05120;
                                                                                                                                                                                                                           entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Brain;
MEDLINE=97165893; PubMed=9013786;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bovidae; Bovinae; Bos.
NCBI_TaxID=9913;
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                                                                                                                                         InterPro; IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                      the European Bioinformatics Institute.
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N-LINKED (GLCNAC...) (POTENTIA
I -> M (IN REF 2; BAB25079).
K -> T (IN REF. 2; BAB24976).
D -> S (IN REF. 2; BAB24976).
KVPMYKA -> RVPTDEY (IN REF. 2; BAB24976).
F -> Y (IN REF. 2; BAB24976).
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Pred. No.
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Matches 1
                                060324;
01-NOV-1997
01-NOV-1997
16-OCT-2001
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15-JUN-2002
15-JUN-2002
Serpin B12.
                                                                                                                                                                                                                                                                                                                                                                                                                         Askew Y.S., Pak S.C., Luke C.J., Askew D.J., Cataltepe S., Mills D. Kato H., Lehoczky J., Dewar K., Birren B., Silverman G.A.;

"SERPINB12 is a novel member of the human ov-serpin family that is widely expressed and inhibits trypsin-like serine proteinases.";

J. Biol. Chem. 276:49320-49330(2001).

1- FUNCTION: Inhibits trypsin and plasmin, but not thrombin, coagulation factor Xa, or urokinase-type plasminogen activator.

1- SUBCELULAR LOCATION: Cytoplasmic (By similarity).

1- TISSUE SPECIFICITY: Expressed in many tissues, including brain, bone marrow, lymph node, heart, lung, liver, pandreas, testis,
                                                                                                                                                                                                                        PROSITE; PS00284; SERTI., SerJin; Serine protease inhibitor.
SerJin; Serine protease inhibitor.
ACT SITE 370 371 REACT
                                                                                                                                                                                                                                                  Pfam; PF00079; serpin; 1. PROSITE; PS00284; SERPIN;
                                                                                                                                                                                                                                                                        EMBL; AF411191; AAL05571.1; -. Genew; HGNC:14220; SERPINB12. InterPro; IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                    entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-21623618; PubMed-11604408; Askew Y.S., Pak S.C., Luke C.J., A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
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            Hypothetical MJ0018
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  Methanococcus jannaschii
                                                                            Y018_METJA
                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                         modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                           between
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                  s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
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9; Conserv
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Metazoa; Chordata; C
היי+heria; Primates; (
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(Rel.
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(Rel. 41, Last sequence up)
(Rel. 41, Last annotation
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                      protein
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Thromb.
                                                                                                                                         SEQUENCE FROM N.A. MEDLINE-87109153; PubMed-3027058;
                                                                                                                                                                                    Homo sapiens (Human
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical protein; TRANSMEM 13 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Science 273:1058-1073(1996).
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MEDLINE-96337999; PubMed-8688087;
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                                           MEDLINE-91048502; Pub)
Meijers J.C.M., Chung
                                                              SEQUENCE FROM N.A.
                                                                                                                                Suzuki
                                                                                                                                                                                                                    SERPINA5 ÓR PCI OR PLANH3 OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGR;
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                     "Evidence for a inhibitor.";
                                                                                                                     Suzuki K., Deyashiki Y., Nishioka
Kamamoto S., Hashimoto S.;
                                                                                                                                                                         NCBI_TaxID=9606;
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Bult C.J., White O., Olsen G.J., Zhou L., Fleischmann R.D., Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D., Kerlavage A.R., Dougherty B.A., Tomb J.-F., Adams M.D., Reich C.I., Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A., Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D., Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C., Cotton M.D., Roberts K.M., Hurst M.A., Kaine B.P., Borodovsky M., Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C., "Complete genome sequence of the methanogenic archaeon, Methanococcus
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                                                                                                                                         "Characterization of a cDNA for human member of the plasma serine protease i J. Biol. Chem. 262:611-616(1987).
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P05154; Q9UG30; Q07616;
13-AUG-1987 (Rel. 05, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Plasma serine protease inhibitor precursor (PCI) (Protein C inhibitor)
Plasman serine protease inhibitor-3) (PAI3) (Acrosomal serine protease
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MEDIJEN=91332018; PubMed=1714450;
Meijers J.C.M., Chung D.W.;
"Organization of the gene coding for human protein
(plasminogen activator inhibitor-3). Assignment of
chromosome 14.";
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                                                                                                                                 "Elucidating the structural chemistry of glycosaminoglycan recognition by protein C inhibitor."; Proc. Natl. Acad. Sci. U.S.A. 87:8506-8510(1990).
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Espana F., Tainer J.A.;
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                      the European Bioinformatics Institute.
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Kuhn L.A., Griffin J.H., Fisher C.L.,
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"Protein C inhibitor from
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                                                            SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: SYNTHESIZED IN LIVER; SECRETED IN PLASMA.
DISEASE: A DEFICIENCY OF PROTEIN C INHIBITOR IS THE CAUSE OF
COMBINED FACTOR V/VIII DEFICIENCY DISEASE.
SIMILARITY: BELONGS TO THE SERPIN FAMILY.
         SWISS-PROT entry is copyright. It is produced through a collabeen the Swiss Institute of Bioinformatics and the EMBL outst
European Bioinformatics Institute. There are no restrictions
by non-profit institutions as long as its content is in
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Best Local S
Matches 11
"Structure"

variations among eubacteria.,

Gene 93:73-78(1990).

-i- FUNCTION: DNA POLYMERASE III IS A COMPLEX, MULTICHAIN ENZYME
RESPONSIBLE FOR MOST OF THE REPLICATIVE SYNTHESIS IN BACTERIA.

THIS DNA POLYMERASE ALSO EXHIBITS 3' TO 5' ECONUCLEASE ACTIVITY.

THE BETA CHAIN IS REQUIRED FOR INITIATION OF REPLICATION ONCE IT
IS CLAMPED ONTO DNA, IT SLIDES FREELY (BIDIRECTIONAL AND ATP-
INDEPENDENT) ALONG DUPLEX DNA (BY SIMILARITY).

TAMBLYPTIC ACTIVITY: N deoxynucleoside triphosphate - N diphosph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; M59236; AAA25774.1; --
PTR; C36144; C36144.
InterPro; IPR004484; CbiA.
InterPro; IPR002586; CbiA.
InterPro; IPR002586; CbiA.
Pfam; Pr01656; CbiA; 1.
TIGRFAMS; TIGR00379; CbiA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY-1991
01-MAY-1991
15-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Crouzet J., Cauchols L., Blanche F., Debussche L., Thibaut D., Rouyez M.-C., Rigault S., Mayaux J.-F., Cameron B.;

"Nucleotide sequence of a Pseudomonas denitrification of structur genes encoding S-adenosyl-L-methionine: uroporphyrinogen III methyltransferase and cobyrinic acid a,c-diamide synthase.";

J. Bacteriol. 172:5968-5979(1990).

-I- FUNCTION: RESPONSIBLE FOR THE AMIDATION OF CARBOXYLIC GROUPS POSITION A AND C OF EITHER COBYRINIC ACID OR HYDROGENOBRYNIC NH(2) GROUPS ARE PROVIDED BY GLUTAMINE, AND ONE MOLECULE OF A DETERMAN CONTROL OF POR EACH AMIDATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DP3B_MICLU P21174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Exthe European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entitles requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A., AND SEQUENCE OF 1-15 STRAIN-SC510; MEDLINE-91008975; PubMed-2211520;
                                                                                                                                                                                                                                                                   Fujita M.Q., Yoshikawa H., Ogasawara N.;
"Structure of the dnaA region of Micrococcus luteus: conservation variations among eubacteria.";
                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE=91033019; PubMed=2172090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Micrococcus luteus (Micrococcus lysodeikticus);
Bacteria; Actinobacteria; Actinobacteria (class);
                                                                                                                                                                                                                                                                                                                                                                                                                            Actinomycetales;
NCBI_TaxID=1270;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA polymerase
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SUBUNIT: HOMODIMER.
SIMILARITY: BELONGS TO THE COBB/COBQ FAMILY. COBB SUBFAMILY.
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(Rel. 18, Last sequence update)
(Rel. 37, Last annotation update)
(Rel. 37, Last annotation update)
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55.0%;
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Pred. No. 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                              SEQUENCE.

TISSUE-Leukocyte;

TISSUE-Leukocyte;

MEDLINE-92202200; pubMed-1551869;

Dubin A., Travis J., Enghild J.J., Potem
T "Equine leukocyte elastase inhibitor. Pr
identification as a thymosin-binding pro
T niol, Chem. 267:6576-6583(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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InterPro; IPR001001; DNA_polIII_beta.
InterPro; IPR001230; Prenyl_site.
Pfam; PF00712; DNA_pol3_beta; 1.
Pfam; PF02767; DNA_pol3_beta_2; 1.
Pfam; PF02768; DNA_pol3_beta_3; 1.
SMARR; SM00480; POL3B2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
SEQUENCE OF 343-362.

MEDLINE-88213423; PubMed-3366785;

Potempa J., Dubin A., Watorek W., Travis J.;

"An elastase inhibitor from equine leukocyte serpin superfamily. Further characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -
                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1988 (Rel. 09, Created)
01-FEB-1994 (Rel. 28, Last sequence up
16-CCT-2001 (Rel. 40, Last annotation
Leukocyte elastase inhibitor (LEI).
                                                                                                                                                                                            "Molecular cloning and express elastase inhibitor from horse Biochem. J. 293:187-193(1993).
                                                                                                                                                                                                                                     Rose-John S.;
                                                                                                                                                                                                                                                MEDLINE-93319507;
Kordula T., Dubin
                                                                                                                                                                                                                                                                            SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                             Equus caballus (Horse).
                                                                                                                                                                                                                                                                                                                                                             SERPINB1 OR ELANH2.
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SUBUNIT: CONTAINS A CORE (COMPOSED OF ALPHA, EPSILON, AND THETA CHAINS) THAT CAN REPAIR SHORT GAPS CREATED BY NUCLEASE IN DUPLEX DNA. FOR EFFICIENT REPLICATION OF THE LONG, SINGLE STRANDED TEMPLATES, POL III REQUIRES THE AUXILIARY CHAINS BET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAMMA, AND DELTA (BY SIMILARITY).
SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
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9; Conserv
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A., Schooltink
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81.8%;
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  cytosol belongs and amino acid s
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TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      determined at 1.95-A resolution.";

J. Mol. Biol. 226:1207-1218(1992).

-I- FUNCTION: THIS INHIBITOR IS THOUGHT TO BE INVOLVED IN THE CONTROL
OF INTRACELLULAR PROTEIN TURNOVER. BINDS TO THYMOSIN BETA-4.
                                                                                                                                                                                                                                                                                                                             Serpin; Serine
                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00079; serpin; 1. SMART; SM00093; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                              EMBL; M91161; AAA97513.1; -. PIR; A28060; A28060. PIR; A37276; A37276. PIR; A42421; A42421.
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or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00284; SERPIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SUBCELLULAR LOCATION: Cytoplasmic.
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baumann U., Bode W., Huber R., Travis J., Potempa J.; "Crystal structure of cleaved equine leucocyte elastase inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-92389327;
                                                                                                                                                                                                                                                                                                                                                                      PIR; S34062; S34062.
PDB; 1HLE; 31-JAN-94.
InterPro; IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  X-RAY CRYSTALLOGRAPHY (1.95 ANGSTROMS).
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Biol. Chem. 2
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157
157
177
181
192
210
213
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1 BLOCKED (WITH AN UNKNOWN CHEMICAL GROUP).
4 345 REACTIVE BOND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   e center.";
263:7364-7369(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                               (See http://www.isb-sib.ch/announce/
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Best Local S
Matches 8
                                                                                                                                                                                                                                 SEQUENCE FROM N.A. (MEDLINE=20461850; Pu
Nakashima T., Pak S. Clayman G.L.;
                                                                                                  TISSUE-Placenta;
MEDLINE-21213570; PubMed=11313015;
Abts H.F., Welss T., Scheuring S., Scott F.L., Irving J.A., Michel Bird P.I., Ruzicka T.;
Bird P.I., Ruzicka T.;
"Sequence, organization, chromosomal localization and alternative "Sequence, organization, chromosomal localization gene hurpin (PII3)
                                                                                                                                                                                              a serpin
Biochim.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SB13_HUMAN STANDARD; PRT; 391 AA.
Q9UTV8; Q9UBW1; Q9UKC0; CP4CX1;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Hurpin (HaCaT UV-repressible serpin) (Protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAND
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HELIX
STRAND
STRAND
STRAND
STRAND
                                                                        splicing of the human serine protease inhibitor which is up-regulated in psoriasis.";
DNA Cell Biol. 20:123-131(2001).
                                                                                                                                                                                                                                                                                          "Identification and cDNA cloning of headpin, a no expressed serpin that maps to chromosome 18q."; Biochem. Biophys. Res. Commun. 264:299-304(1999).
                                                                                                                                                                                                                                                                                                                                                                           skin specific, UV-repressible ovalbumin serpin family."; J. Mol. Biol. 293:29-39(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TURN
                                                                                                                                                                                                                                                                                                                             MEDLINE=99458661; PubMed=10527881; Spring P., Nakashima T., Frederick M.,
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Headpin) (Serpin B13).
SERPINB13 OR PI13.
                                                                                                                                                                                                        "Genomic cloning,
a serpin which is
                                                                                                                                                                                                                                                                                                                                                                                                                             Ruzicka T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Abts H.F., Welss T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=99443898; PubMed=10512713;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                rissue=skin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9606,
                                                                                                                                                                        SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                               Cloning and characterization
of keratinocytes.
SUBSCELLULAR LOCATION: Cytoplasmic.
ALTERNATIVE PRODUCTS: 2 isoforms;
produced by alternative splicing.
TISSUE SPECIFICITY: SKIN-SPECIFIC.
                                                              FUNCTION: May play a role
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302 ADLSGMSGARDLFVSKIIHK 321
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                                                                                                                                                                                              Biophys.
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313
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369
379
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                                                                                                                                                                      N.A.
                                                                                                                                                                                                                                            850; PubMed=11004515;
Pak S.C., Silverman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              308
343
343
353
353
368
368
376
43006 N
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                                                                                                                                                                                             mapping, structure and p
down-regulated in head a
Acta 1492:441-446(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISOFORM 1).
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                                                                                                                                                                                                                                                                                                                                                      (ISOFORM 1).
                                                                                                                                                                                                                                                                    (ISOFORM 1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Mirmohammadsadegh A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43.98;
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                                                                                                                                                                        2).
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Pred. No.
                                                               in
                                                                                                                                                                                                                                                                                                                                                                                                    of hurpin (Protease Inhibitor 13): serine proteinase inhibitor of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72DED1999371427A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                               the
                                                                                                                                                                                                                                             G.A.,
                                                               proliferation
                             _
                                                                                                                                                                                                                                                                                                                             Henderson Y.,
                             (shown here) and 2;
                                                                                                                                                                                                                                             Spring
                                                                                                                                                                                                        promoter analysis of HEADPIN,
and neck cancer cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                       Koehrer K.,
                                                                                                                                                                                                                                            P.M.,
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                                                                                                                                                                                                                                                                                                                  novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 379;
                                                                                                                                   Irving J.A., Michel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inhibitor
                                                                                                 gene hurpin (PI13),
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                                                                or
S
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                                                                                                                                                                                                                                                                                                                  Clayman G.;
differentially
                                                                differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                       Michel G.,
                             are
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RESULT 11

SPI2_HUMAN

ID SPI2_HUMAN

AC 075830;

DT 15-JUN-2002

DT 15-JUN-2002

DT 15-JUN-2002

DE SERPINIZ OR

SERPINIZ OR

CON SERPINIZ OR

CON SERPINIZ OR

CON HOMO SAPIEN

CON HOMO SAPIEN
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Best Local
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ACT_SITE
VARSPLIC
CONFLICT
CONFLICT
CONFLICT
CONFLICT
SEQUENCE
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PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
Serpin 12 precursor (Myoepithelium-derived serine
(Pancpin) (Protease inhibitor 14) (TSA2004).
SERPINIZ OR PI14 OR MEPI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
EMBL;
EMBL;
"Suppression of breast
myoepithelium-derived a
mammary myoepithelial o
                                                                                                            SEQUENCE FROM N.A. PubMed=10097100; Xiao G., Liu Y.E.,
                                                                                                                                                                                                                            Ozaki K., Nagata M., Suzuki M., Pujiwara T., Miyo Ohigashi H., Imaoka S., Takahashi E., Nakamura Y. "Isolation and characterization of a novel human gene, pancpin, that is down-regulated in pancreat Genes Chromosomes Cancer 22:179-185(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 XIX.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the
                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM
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Pfam; PF00079;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genew;
                                                                                                                                                                                                                                                                                                                                                                           PubMed-9624529;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRINTS;
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L; AJ001697; CAA04936.2; -.
L; AJ001698; CAA04937.1; -.
L; AF169949; AAD55765.1; -.
L; AF216854; AAF72879.1; -.
L; AJ278717; CAC03569.1; -.
L; P9; P05120; 1BY7.
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SM00093; SERPIN; 1.
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8; Conservative
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1284; SERPÍN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chordata;
Primates;
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                                                      cancer growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REACTIVE BOND (BY SIMILAN MISSING (IN ISOFORM 2).
S -> N (IN REF. 4).
MISSING (IN REF. 1; CAAO.
G -> S (IN REF. 2).
E -> Q (IN REF. 1; CAAO.4)
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Pred. No.
                                                                                                                Sang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2CA88558D4BC2B09
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                                                                                                                Q.A.,
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IVE BOND (BY SIMILARITY).
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                           inhibitor expressed in
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                                                                                                                                                                                                                                                           el human pancreas-specific pancreatic cancer cells."
                                                                                                                J.,
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ıra Y.;
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CRC64;
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                                                                                                                   I.D.,
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Best Local S
Matches 8
                            Alenk H.-P.,
Alenk H.-P.,
Alenk H.-P.,
Alenk H.-P.,
Complete genome seque...
"Complete genome seque...
"anaschil.";
jannaschil.";
jannaschil.";
jannaschil.";
jannaschil.";
To A.FULGIDUS AF0817.
                                                                                                                                                                                                                                                                                                                                                                        15-JUL-1998
15-JUL-1998
16-OCT-2001
                                                                                             STRAIN-JAL-1 / DSM 2661 / ATCC 43067;

MEDLINE-9633799; PubMed-8688087;

Bult C.J., White O., Olsen G.J., Zhou L., Fleischmann R.D.,

Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D.,

Kerlavage A.R., Dougherty B.A., Tomb J.-F., Adams M.D., Reich C.I.,

Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A.,

Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D.,

Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C.,

Cotton M.D., Roberts K.M., Hurst M.A., Kaine B.P., Borodovsky M.,

Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.;

"Complete genome sequence of the methanogenic archaeon, Methanococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACT_SITE CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              between the Swiss Institute of Bioinformatics and the Fi
the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by ar
entities requires a license agreement (See http://www.isb-
or send an email to license@isb-sib.ch).
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                   Archaea; Euryarchaeota; Methanococci; Met. Methanocaldococcus Methanocaldococcus; Methanocaldococcus NCBI_TaxID=2190;
                                                                                                                                                                                                                                                                                                                                                         Hypothetical
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-i- TISSUE SPECIFICITY: Expressed in pancreas and
-i- SIMILARITY: BELONGS TO THE SERPIN FAMILY.
                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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AF130470;
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Pred. No.
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RESULT 13
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16-OCT-2001 |
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MEDLINE-9333770; PubMed-9665876;
Fraser C.M., Norris S.J., Weinstock G.M., White O., Sutton G.G.,
Dodson R., Gwinn M., Hickey E.K., Clayton R., Ketchum K.A.,
Sodergren E., Hardham J.M., McLeod M.P., Salzberg S., Peterson J.,
Khalak H., Richardson D., Howell J.K., Chidambaram M., Utterback T.,
McDonald L., Artlach P., Bowman C., Cotton M.D., Fujii C., Garland S.,
Hatch B., Horst K., Roberts K., Sandusky M., Weidman J., Smith H.O.,
                                                                                                                       Pfam; PF02033; RBFA; 1.
ProDom; PD007327; Rib_bind_facta;
                                                                                                                                                                                                                                                           entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
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Bacteria; Spirochaetales;
                                                                                                                                                                                               EMBL; AE001258; AAC26580.1; TIGR; TP0890; -.
                                                                                                                                                                                                                                                                                                        modified and this statement is not removed
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                                                                                                                                                                        InterPro; IPR000238; Rib_bind_factA.
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                                                                                                                                                                                                                                                                                                                                          s SWISS-PROT entry is copyright. It is produced through a collaboratic ween the Swiss Institute of Bioinformatics and the EMBL outstation European Bioinformatics Institute. There are no restrictions on it
                                        ITE; PS01319; RBFA; 1.
processing; Complete
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(Rel. 37, Last sequence update)
(Rel. 40, Last annotation update)
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Score 42;
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RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    p30740;
01-APR-1993 (Rel. 25, Created)
01-APR-1993 (Rel. 25, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Leukocyte elastase inhibitor (LEI) (Monocyte/
                                                                                                 EMBL; M93056; -; NOT_ANNOTATED_CDS.
EMBL; AF053630; AAC31394.1; -.
EMBL; BC009015; AAH09015.1; -.
PIR; S27383; S27383.
HSSP; P05619; 1HLE.
Aarhus/Ghent-2DPAGE; 4314; IEF.
                                                                                                                                                                                                                                                                                   use by non-profit institutions as long modified and this statement is not removed entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

MEDLINE-92302296; PubMed-1376927;

Remold-O'Donnell E., Chin J., Alberts M.;

"Sequence and molecular characterization of human monocyte/neutrophil elastase inhibitor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Microsequences of 145 proteins recorded in the two-dimensional geprotein database of normal human epidermal keratinocytes."; Electrophoresis 13:960-969(1992).

-i- FUNCTION: REGULATES THE ACTIVITY OF THE NEUTROPHIL PROTEASES ELASTASE, CATHEESIN G AND PROTEINASE-3.

-i- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).

-i- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                          the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                    between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inhibitor) (M/NEI) (EI).
SERPINB1 OR ELANH2 OR PI2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /andekerckhove J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kasmussen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Keratinocytes;
MEDLINE=93162043; Pub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Structure and sequence of human M/NEI inhibitor), an Ov-serpin family gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zeng W., Silverman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE-98296265; PubMed-9630619;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LEU_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                               SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           213:179-187(1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44 DVSGGMVCARVYVSSFMGK.62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178-185; 204-210 AND 364-371
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                             (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (monocyte/neutrophil elastase
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Genew; HGNC:3311; MIM; 130135; -. ,

SERPINB1

nterPro;

PF00079; serpin;

IPR000215; Serpin

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RESULT 15
SX11_CHICK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A Uwanogho D., Rex M., Cartwright E.J., Pearl G., Healy C.,
A Scotting P.J., Sharpe P.T.;
T "Embryonic expression of the chicken Sox2, Sox3 and Sox11 genes
T suggests an interactive role in neuronal development.";
L Mech. Dev. 49:23-36(1995).
C -1- FUNCTION: MAY FUNCTION AS SWITCHES IN NEURONAL DEVELOPMENT.
C -1- SUBCELLUIAR LOCATION: Nuclear.
C -1- SUBCELLUIAR LOCATION: Nuclear.
C -1- TISSUE SPECIFICITY: LOW LEVEL EXPRESSION IS SEEN IN
UNDIFFERENTIATED PROLIFERATING CELLS OF NEURAL EPITHELIUM. A
C GREATER EXPRESSION IS SEEN IN THE MATURING NEURONS AFTER THEY
C LEAVE THE NEURAL EPITHELIUM. TI IS ALSO FOUND IN THE GUT
EPITHELIUM AND ADRENAL MEDULLA.
C -1- SIMILARITY: CONTAINS 1 HMG BOX.
                                                                                        Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
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PROSITE; PS00784; SERPIN; 1.

Serpin; Serilne protease inhibitor.

ACT_SITE 344
345

REACTIVE BOND (BY SIMILARITY).

SEQUENCE 379 AA; 42741 MW; BAAE08DFCBCD8CD3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).

      Transcription regulation;
      DNA-binding;

      DNA_BIND
      49
      117
      HMG BOX.

      DOMAIN
      165
      POLY BOX.

      DOMAIN
      204
      212
      POLY-GLU.

      DOMAIN
      288
      294
      POLY-PRO.

      DOMAIN
      332
      335
      POLY-ARG.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; U12534; AAB09664.1; -. HSSP; P48436; 1SX9.
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MEDLINE-95267693; PubMed-7748786;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
16-CCT-2001 (Rel. 40, Last annotation update)
Transcription factor SOX-11.
                                                                                                                                                                                   SEQUENCE
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2 DLSGIASGGRLYIS 15
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                                                           Similarity
8; Conserv
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                                                                                                                                                                             396 AA;
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                                                                                                                                                                                43503 MW;
                                                                                        42.98;
57.18;
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Pred. No.
                                                                                        Score 42; DB 1;
Pred. No. 19;
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                                                        4; Indels
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1: sp_archea:*
2: sp_bacteria
3: sp_fungi:*
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Gapop 10.0 , Gapext 0.5
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98
1 ADLSGIASGGRLYISRMMGK 20
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sp_virus:*
sp_vertebrate:*
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sp_rvirus:*
sp_bacteriap:*
sp_archeap:*
                                                                                                                                   sp_organelle:*
sp_phage:*
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sp_invertebrate:*
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sp_rodent:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
43	43	43	43	43	43	43	43	43		43	43	43.5	43.5	•		43.5	44	44	44	44	44	44	44	44	44	44	44	45
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ALIGNMENTS

SEX CENTRE FROM N. C.	7
	2 2
Nature 409:685-690(2001).	? P
"Functional annotation of a full-length mouse cDNA collection.";	RT RA
Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,	RA
Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,	RA
Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch KF.,	RA
Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,	RA
Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,	RA
Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,	RA
Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,	RA :
Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,	RA :
Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,	R A
Cobried I M Charles C., March D Gometh M Wagner I Wachio H Cobridate C., March C., Mar	0 3
	2 Z
Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,	RA A
Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,	RA
Kondo S., Yamanaka	RA
, Adachi J., Fukuda	RA
Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,	RA
MEDLINE=21085660; PubMed=11217851;	RX
STRAIN=C57BL/6J; TISSUE=SKIN;	ا م
SEQUENCE FROM N.A.	ŖР
[1]	RN
	o X
Rodentia; Sciurognathi; Muridae;	8
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	8
Mus musculus (Mouse).	SO
SERPINB7 OR 4631416M05RIK.	GN
in).	DE
(TrEMBLrel. 21,	ij
01-JUN-2001 (TremBirel. 17, Last sequence update)	DΤ
01-JUN-2001 (TremBLrel. 17, Created)	DT
Q9D695;	AC
Q9D695 PRELIMINARY; PRT; 380 AA.	ID
995 L	Q9D695
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Murinae;

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RESULT 2
Q9203
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DT 01-M
DC Ress
OS Rattt
CC EUKa
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RA Wang
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Pfam; PF00079; Serpin; 1.
SMART; SM0093; SERPIN; 1.
PROSITE; PS00284; SERPIN; UNKNOWN_1.
PROSITE; PS00284; 43050 MW; C924(
                                                                                                                    01-NOV-1996
01-NOV-1996
01-DEC-2001
                                                                                                                                                                                                               Q63547
Q63547;
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-i-SIMILARITY: BELONGS TO THE SERPIN FAMILY. EMBL; AF105329; AAL16769.1; -InterPro; IPR000215; Serpin.
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Q920J5;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutherla; Rodentia;
NCBI_TaxID=10116;
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Kidney Int. 60:641-652(2001).

EMBL; AK014524; BABB99410.1; -.

EMBL; AF105328; AAL16768.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE-21368006; Pubmed-11473647;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Megsin.
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                               Rattus norvegicus
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Yagi M., Nagano N., Inagi R., Kurokawa K.;
"Cloning of rodent megsin revealed its up-regulation in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGD; MGI:2151053; Serpinb7.
InterPro; IPR000215; Serpin.
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(Rat).
a; Chordata;
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Craniata; Vertebrata;
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InterPro; IPRO00210; BTB_POZ.
InterPro; IPRO01798; Kelch.
Pfam; PF00651; BTB; 1.
Pfam; PF01344; Kelch; 5.
SMART; SM00225; BTB; 1.
PROSITE; PS50097; BTB; 1.
SEQUENCE 615 AA; 68139 MW;
                                                                                                                                                                                                                               Nishikawa T., Nagai K., Sugaiyama T., Otsuki T., St
Matsunawa H., Ishii S., Kawai Y., Saito K., Yamamoto J.,
Nakamura Y., Nagahari K., Masuho Y., Sasaki N.;
"NEDO human CDNA sequencing project.";
Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AK001940; BAA91990.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA FLJ11078 fis,
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01-DEC-2001
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Cronshagen U., Chen C., Kern H.F.;
"A novel protein expressed exclusively
                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR000215; Ser
Pfam; PF00079; serpin; 1
SMART; SM00093; SERPIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mammalia; Eutheria; NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                      ISSUE=PLACENTA;
ISogai T., Ota T.,
                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00284; SERPIN; UNKNOWN_1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; Z30585; CAA83060.1; HSSP; P01008; LATH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (MAR-1994)
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                                                             l Similarity
10; Conserv
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AGAASGGRLYIS
                              SGIASGGRLYIS 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISGITDSSELYVSRAMOK 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            191 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TrEMBLrel. 15, (TrEMBLrel. 15, (TrEMBLrel. 19,
                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    clone
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                                                                              51.0%;
83.3%;
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57.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15, Last sequence update)
19, Last annotation update)
PLACE1005102, weakly similar
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THE SERPIN FAMILY.
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Pred. No:
                                                                                Score 50;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
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                                                                                                                              1583474AF5A45E8D CRC64;
                                                               Mismatches
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RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y.,
Konno H., Kando S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Shburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Shburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tonita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Fiuruo M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boilt C., Fletcher C., Fujita M., Gariboldi M.,
RA Blake J., Boilt C., Fletcher C., Fujita M., Gariboldi M.,
RA Blake J., Boilt C., Fletcher C., Fujita M., Gariboldi M.,
RA Blake J., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Mynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Mynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
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Best Loc
Matches
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Q9D7P9;
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
1-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical 68.2 kDa protein.
Homo sapiens (Human).
Eukhryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukhryota; Metazoa; Chordata; Craniata; Hominidae; Homo.
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SEQUENCE 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg R.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ EMBL; BC026319; AAH26319.1;
                                                                                                                                        "Functional annotation of a Nature 409:685-690(2001).
-I- SIMILARITY: BELONGS TO TEMBL; AK009018; BAB26028.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse)
Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                   PROSITE;
                                                                                      InterPro; IPR000215; Serpin
                                                                                                          MGD; MGI:1919119;
                                                                                                                                                                                                                Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                  PF00079; serpin; 1; SM00093; SERPIN;
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                                                                                                                          P05619; 1HLE.
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                                   PS00284;
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615 AA; 6
     423
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(TrEMBLrel. 17, Last sequence up
(TrEMBLrel. 21, Last annotation
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                                                                                                          2300003F07Rik.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68171 MW;
   47834 MW;
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83.3%;
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                                                                                                                                                          TO THE SERPIN FAMILY
                                                                                                                                                                                           full-length
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
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   5A22BE2FE51B6120 CRC64;
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                                                                                                                                                                                            collection.";
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Best Local
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Q9MZ16;
01-OCT-2000
01-OCT-2000
01-JUN-2001
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Ol-MAY-2000 (TremBlrel: 13, Last se
Ol-JUN-2002 (TremBlrel: 21, Last an
                                                                                                           GnRH
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InterPro; IPR003209; Peptidase_
Pfam; PF002225; PA; 1.
Pfam; PF00082; Peptidase_S8; 2.
PRINTS; PR00723; SUBTILISIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             White O., Eisen J.A., Heidelberg J.F., Hickey E.K., Peterson J.D., Dodson R.J., Haft D.H., Gwinn M.L., Nelson W.C., Richardson D.L., Moffat K.S., Qin H., Jiang L., Pamphile W., Crosby M., Shen M., Vamathevan J.J., Lam P., McDonald L., Utterback T., Zalewski C., Makarova K.S., Aravind L., Daly M.J., Minton K.W., Fleischmann R.D., Ketchum K.A., Nelson K.E., Salzberg S., Smith H.O., Venter J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9RW57
Q9RW57;
                                         Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIGR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AE001935; AAF10389.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    radiodurans R1."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria; Thermus/Deinococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Deinococcus radiodurans
NCBI_TaxID-9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00343; GRAM_POS_ANCHORING; PROSITE; PS00138; SUBTILASE_SER; UNKNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Science 286:1571-1577(1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-RI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR001899; Gram_pos_anchor
                                                                                                                                                                                                                                                                 æ
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DR0812; -.
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                                                                                                                                                                                                                                                                                                                                                                        3 LSGIASGGRLYISRMMG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADLSGIASGGRLYISRMMGK
                                                                                                                                                                                                                                                                                                                               VGGVASGVNLYMARVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Complete proteome. 591 AA; 59158 MW;
                                                                                                                             ) (TrEMBLIEL.
) (TrEMBLIEL.
L (TrEMBLIEL.
                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PubMed-10567266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     49.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                          49.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptidase_S8
                                                                                                                               15,
15,
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                                                                                                                                 Last sequence update)
                                                                                                                                                                               Created)
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2EBAD3440D1FA5E4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence up
annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                          No.
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                                                                                                                                                                                                                        327
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                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16;
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                                                                                                                                 update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 591;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 423
                                           Euteleostomi;
Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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Best Local S
Matches 10
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Best Local S
Matches 10
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008804;
01-JUL-1997
01-DEC-2001
01-JUN-2002
                                                                                                                                                      Serpin.
SEQUENCE
                                                                                                                                                                                                                 MGD; MGI:894688; Spil2.
InterPro; IPR000215; Se
Pfam; PF00079; serpin;
SMART; SM00093; SERPIN;
                                                                                                                                                                                                                                                                                           McKeone R., Denny P., Cooley J., Benarafa C., Remold-O'D Ragoussis J., Bird P.I.;

"Comparison of human chromosome 6p25 with murine chromos a greatly expanded Ov-serpin gene repertoire in the mous submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.

-- SIMILARITY: BELONGS TO THE SERPIN FAMILY.

EMBL; U96707; AAB57819.2; --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "A new family of 10 murine ovalbumin serpins includes two homologs of proteinase inhibitor 8 and two homologs of the granzyme B inhibitor (proteinase inhibitor 9).";

(proteinase inhibitor 9).";

Biol. Chem. 272:15434-15441(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPI12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-2001 (TrEMBLrel. 19, 01-JUN-2002 (TrEMBLrel. 21, Serine proteinase inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PR00237; GPCRRHODOPSN.
PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor as a site critical for the antagonists.";
Mol. Endocrinol. 14:671-681(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-20267228; PubMed-10809231;
Cui J., Smith R.G., Mount G.R., Lo J.L., Yu J., Walsh T. Singh S.B., DeVita R.J., Goulet M.T., Schaeffer J.M., Ch "Identification of Phe313 of the gonadotropin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-C57BL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
                                                                                                                                                                                            PROSITE; PS00284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=97326124; PubMed=9182575;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kaiserman D., Knaggs S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Endocrinol. 14:671-681(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AF206513; AAF87097.1; -.
Pro; IPR000276; GPCR_Rhodpsn.
PF00001; 7tm_1; 1.
                                                                   10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . Similarity
10; Conserv
                                                                                       Similarity
ADLSGIASGGRLYISRMMGK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |||| :| :||| ||:
LSGIFAGPQLYIFRMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LSGIASGGRLYISRMM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                327
                                                                                                                                                      377
                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TrEMBLrel. 04,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                      AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ā
                                                                                                                                                                                                                       SERPIN; 1.
                                                                                                                                                                                                 SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chordata;
Rodentia;
                                                                                                                                                      42535 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37655 MW;
                                                                                     46.9%;
                                                                                                                                                                                                                                                              Serpin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scarff K.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
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                                                              Score 46; DB Pred. No. 26; 5; Mismatches
                                                                 5,
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Last annotation update)
NK13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 46; DB Pred. No. 22; 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                      9660E8F3A41EE47A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            778A82A9D25D3371 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                  K.L., Gillard
Benarafa C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                           11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of nonpeptide GnRH
                                                                 ū
                                                                                                                                                                                                                                                                                                                                                                                                                                    A., Mirza G., Ca
Remold-O'Donnell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ų.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 327
                                                                                                       Length 377;
                                                                                                                                                                                                                                                                                                                                                                     the mouse.
                                                                                                                                                                                                                                                                                                                                                                                         chromosome 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi;
Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cheng K.;
                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cadman
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                                                                 Gaps
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RESULT
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                                                                                     Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 9
                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yan Y.T., Liu S.X.;
"Serpin Sequence of Schistosoma ja
Submitted (OCT-2000) to the EMBL/(
EMBL; AF317731; AAG45932.1; -.
InterPro; IPR000215; Serpin.
Pfam; PF00079; Serpin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-2001
01-DEC-2001
01-MAR-2002
                                                                                                                                                                                                 YAN Y.T., LIU S.X., Song G.C.;
YAN Y.T., LIU S.X., Song G.C.;
"Full-length of Scrpin Sequence of Schistosoma Submitted (MAY-2001) to the EMBL/GenBank/DDBJ COLORS TO THE SERPIN FAMILY.
EMBL, AF380366; AAK57435.1; -.
InterPro; IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAR-2001
01-MAR-2001
01-JUN-2002
                                                                                                                                                 Protease;
SEQUENCE
                                                                                                                                                                                     Pfam;
                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=6182;
                                                                                                                                                                                                                                                                                                                                                                       Schistosomatoidea;
                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                            Schistosoma
                                                                                                                                                                                                                                                                                                                                                                                                                                             Serine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q967L9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9GPL2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-CHINESE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schistosomatoidea;
NCBI_TaxID=6182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schistosoma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11
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320
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                                                                                                                                                                              PF00079; serpin;
                                  \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SM00093; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                             protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Fragment).
                                                                     Similarity 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity 60. 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADLSGIASGGRLYIS
                                ADLSGIASGGRLYIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADFSGIASKEGLFLSKVIHK 321
ADLSGISSKNNLYVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADLSGISSKNNLYVN
                                                                                                                                                 Serpin.
                                                                                                                                                                                                                                                                                                                                                                     a japonicum (Blood fluke).
Metazoa; Platyhelminthes;
atoidea; Schistosomatidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                           (TrEMBLrel. 19
(TrEMBLrel. 19
(TrEMBLrel. 20
ease inhibitor
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Metazoa; Platyhelminthes;
Loidea; Schistosomatidae;
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                                                                       Conservative
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60.08;
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Pred. No.
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EMBL/GenBank/DDBJ
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Last annotation
                                                                     Pred. No. 28;
3; Mismatches
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                                                                                                                                                 36BB918B393689BF CRC64;
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28;
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                                                                                             Serpin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              *Molecular cloning and expression of serine proteinase inhibitor from Trichinella spiralis.";

Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.

-- SIMILARITY: BELONGS TO THE SERPIN FAMILY.

EMBL; AF231948; AAF63473.1;

HSSP; P01008; lath.

InterPro: IPR000215; Serpin.
                                                                                                                           Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.

'- SIMILARITY: BELONGS TO THE SERPIN FAMILY.
EMBL; U1103; AAA50230.1; -.
EMBL: AF043997; AAC02994.1; -.
Interpro; IPR000215; Serpin.
Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. Ogundipe J.O., Ras
                                                                                                                                                                                                                                                                                                                                                                                Schistosoma japonicum (Blood fluke).
Eukaryota; Metazoa; Platyhelminthes;
Schistosomatoidea; Schistosomatidae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00079; serpin; 1. SMART; SM00093; SERPIN; 1.
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Trichinella spiralis
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                                                                                                                                                                                                                                       Hooker C.W., Brindley P.J.;
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                  Local Similarity 64.:
nes 9; Conservative
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Last sequence update)
Last annotation updat
                Score 45; DB
Pred. No. 40;
2; Mismatches
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Last annotation update)
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Schistosoma.
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BJ databases.
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                                                                                          SUZUKI M., Takahashi T., Komeda
"CORYMBOSA2 (CRM2), a gene requi
Arabidopsis thaliana.";
Submitted (DEC-2000) to the EMBI
EMBL; AF327068; AAK16435.1; -.
InterPro; IPR000159; DS_RBD.
InterPro; IPR000151; SAM_bind.
Pfam; PF00035; dsrm; 1.
SEQUENCE 942 AA; 104454 MW;
                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2001
01-JUN-2001
01-JUN-2002
CORYMBOSA2.
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01-AUG-1998 (TrEMBLrel. 07, Last sequen,
01-JUN-2002 (TrEMBLrel. 21, Last annota-
Hypothetical 104.5 kba protein.
Arabidopsis thaliana (Mouse-ear cress).
                                                                                                                                                                                                                                                                                    Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR001159;
InterPro; IPR000051;
Pfam; PF00035; dsrm;
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Lee P.Y., Truong M.T.,
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                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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9; Conserv
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                                                                                                                                                                                                                       Komeda
                               Score 45; DB 10;
Pred. No. 1.1e+02;
4; Mismatches 7
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Last sequence update)
Last annotation updat
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                                                                                               CRC64;
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Indels

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Gaps

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eudicots;

Rosidae;

Tracheophyta;

Male-Sterile

Indels

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Gaps

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Search completed: July 11, 2003, 11:59:02 Job time : 10.7318 secs

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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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1: /SIDS2/gcgdata/
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                                                                                                                                                                                                                                                                                                                                                                                        /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1989.DAT:*
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AAB16557
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Bacteriophage 44AH
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AAW77753	AAM85183	ABG27218	ABB68256	ABB64300	AAB18250	ABG04001	ABG09655	ABG06618	ABG10815	ABG06075	ABB71439	AAW56569	AAW18306	AAG90902	ABB71685	AAU36616	AAY57586	ABG15599	AAE10377	AAB79070	AAG90403	AAB83075	AAB24142	AAY08254	AAR48379	ABB93723	AAG37818	AAG25579	AAB79071	AAG37819	AAG25580	3782	AAG25581	ABB49942
Pyruvate oxidase p	Human immune/haema	3		Drosophila melanog	-	human	human	human	human	_	Drosophila melanog	Toxin TccC, encode	Photorhabdus lumin	C glutamicum prote	Drosophila melanog	Staphylococcus aur	Human papillomavir	Novel human diagno	Salmonella typhi (megsin	megsin	н	~		Arabidopsis thalia	H			thal	sis thali	Listeria monocytog

ALIGNMENTS

RESULT 1 AAR57113

AAR57113 standard; peptide; 5 AA.

16-AUG-1994 (first entry)

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Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                               17-JUL-1992;
04-MAR-1993;
       WPI; 1994-058782/08
                        Tsujimoto M,
                                                   (SUNR ) SUNTORY LTD. (TSUJ/) TSUJIMOTO M.
                                                                                                                            23-FEB-1994.
                                                                                                                                             EP583884-A.
                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                    Human megakaryocyte differentiation factor peptide
                                  Ishida N,
                                                                                                          19-JUL-1993;
                        Iwasa F, Kuril
M, Tsuruoka N,
                                                                              92JP-0212305
93JP-0067339
                                                                                                          93EP-0305654
                                  Kurihara T,
                        ra T, Miura K,
Yamaguchi N, Ya
                        (, Nakazato
Yamaichi K;
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RESULT 2
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03-JUN-1999;
28-SEP-1999;
30-SEP-1999;
01-DEC-1999;
02-DEC-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol. wt. 55-57kD by SDS-PAGE, exhibits an isoelectric point of 6.0-7.0 and contains an amino acid sequence comprising at least one of the sequences AAR57107-R57115.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human MDF (see AAR48379) can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietimaking it useful for treatment of diseases involving a decrease making it useful for treatment of diseases involving a decrease
The present invention describes a method for identifying a bacteriophage coding region encoding a product active on an essential bacterial target. The method comprises identifying a nucleic acid sequence encoding a gene product that provides a bacteria-inhibiting function when an
                                                                                                                                                                                 Pelletier
                                                                                                                                                                                                                                                                                                                       03-DEC-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-OCT-2000
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                                                                  Example
                                                                                    Identifying a bacteriophage coding region for treating bacterial infections comprises identifying a nucleic acid encoding a produinhibits bacteria when a bacteriophage infects a bacterium
                                                                                                                                                                                                        (PHAG-) PHAGETECH INC
                                                                                                                                                                                                                                                                                                                                                                        WO200032825-A2
                                                                                                                                                                                                                                                                                                                                                                                                 Bacteriophage 44AHJD
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DB; AAA69042.
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                                                                9; Page
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99US-0326144.
99US-0407804.
99US-0157218.
99US-0168777.
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thrombopoietin
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e MDF
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Best Local
                                                                    manufacture infection. T 44AHJD ORF 2
                                                                               The invention relates to a novel Staphylococcus aureus polypeptide (STAAU_R2), and it's use in drug screening assays. The polypeptide of invention has antibacterial activity. The compound active on STAAU_R2 useful for the manufacture of an antibacterial agent or for the manufacture for medicament for treating or preventing a bacterial infection. The sequence represents the amino acid sequence of S. aureu
                                                                                                                                                                                Use of a Staphylococcus aureus (STAAU_R2) polypeptide or composition comprising STAAU_R2 and polypeptide encoded by bacteriophage open reading frame that specifically interacts with STAAU_R2, for identify a compound active on STAAU_R2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             uncharacterised bacteriophage infects a pathogenic bacterium. The compound active on a target of a bacteriophage inhibitor protein in a bacterial is used to treat or prevent a bacterial infection in an animal. AAA68243 to AAA69442 and AAB16523 to AAB16954 represent bacteriophage nucleotide and protein sequences which are used in the exemplification of
                                               Sequence
                                                                                                                                                            Claim
                                                                                                                                                                                                                                        WPI; 2002-566592/60.
N-PSDB; ABN86788.
                                                                                                                                                                                                                                                                                                                     30-NOV-2000;
20-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Staphylococcus
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2001US-0885561
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                                                                                                                                                                                                                    CC Streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (C (Streptococcus/GBS), comprising one of 5483 sequences ($1), given in CC the specification. The proteins have antibacterial and antiinflammatory CC activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and CC antibodies that bind (I) are used in the manufacture of medicaments for CC streptococcus bacteria, particularly S. agalactiae and S. pyrogenes. CC Nucleic acids encoding (I) are used to detect Streptococcus in a CC biological sample. (I) is used to detect Streptococcus in a CC comprising (I) or a nucleic acid encoding (I), may be used as a vaccine or diagnostic composition. The disease caused by CC Streptococcus that is prevented or treated may be meningitis. Nucleic acid encoding (I) may be used to recombinantly produce (I) and m
                                                                                                         Best
                                                                                   Matches
                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New Streptococcus protein for the treatment or prevention of infection or disease caused by Streptococcus bacteria, such as meningitis, and for detecting a compound that binds to the protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GENO-)
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                                                                                                                                                                    Sequence
                                                                                                                                                                                                           Streptococcus proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a protein (ABP25413-ABP30895) from group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 4037; 4525pp; English.
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24-NOV-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Streptococcus pyogenes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae; group A streptococcus; Streptococcus pyogenes; antibacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABP29986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABP29986 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CHIR-) CHIRON SPA.

(GENO-) INST GENOMIC RES
                                                                                                         Local
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DB; ABN70617.
32
                                                                                Similarity
5; Conser
                                       LYDAK 5
LYDAK 36
                                                                                                                                                                    69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; 2000GB-0026333.
; 2000GB-0028727.
; 2001GB-0005640.
                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                    <u>Α</u>,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polypeptide SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  infection;
                                                                                                  100.0%;
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                                                                                                Score 26;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₹
                                                                                Mismatches
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                                                                                                                        23;
                                                                                                                      Length
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RESULT

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Protein;

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RESULT 6
AAB51492
ID AAB5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a protein (ABP25413-ABP30895) from group B CC streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in CC the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and CC antibodies that bind (I) are used in the manufacture of medicaments for the treatment or prevention of infection or disease caused by CC Streptococcus bacteria, particularly S. agalactiae and S. pyrogenes. CC Nucleic acids encoding (I) are used to detect Streptococcus in a CC biological sample. (I) is used to detectmine whether a compound binds to CC (I). A composition comprising (I) or a nucleic acid encoding (I), may be used to recombinantly produce (I) and may be cold encoding (I) may be used to recombinantly produce (I) and may be considered and sent therapy. Antibodies to (I) are used for affinity
                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New Streptococcus protein for the treatment or prevention of infection or disease caused by Streptococcus bacteria, such as meningitis, and for detecting a compound that binds to the protein \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae; group A streptococcus; Streptococcus pyogenes; antibacterial; antilnflammatory; infection; vaccine; meningitis; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Streptococcus pyogenes
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                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 3912; 4525pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-352536/38.
N-PSDB; ABN69924.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                              Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                       chromatography,
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24-NOV-2000;
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                                                                                                                                                              3
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INST GENOMIC
                                                                                                                                                                                                                                                                     Similarity
5; Conser
                                                                                                                                                              LYDAK 37
                                                                                                                                                                                                                                                                                                                                                                               70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000GB-0026333.
2000GB-0028727.
2001GB-0005640.
                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                              proteins.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunoassays, and distinguishing/identifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RES
                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                 .08;
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                                                                                                                                                                                                                                                                                                 Score 26;
Pred. No.
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                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                          DВ
                                                                                                                                                                                                                                                                                                                          23;
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                                                                                                                                                                                                                                                                                                                          70;
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RESULT 7
AAB51494
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                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant)agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and ovarian cancer, and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g. cerebral anotia and epilepsy; and (f) information dispersions and epilepsy; and (f) in the dispersion of the 
                                                                                                                                               AAB51494 standard; Protein; 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and (f) infectious diseases such as viral,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 400; 410pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid molecules encoding 45 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions used as food additives or preservatives -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAR-1999;
07-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiallergi: hepatotropic; antidiabetic; antiinflammatory; antiulcer;
vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
                                                 16-FEB-2001
                                                                                                AAB51494;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             parasitic infections. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-MAR-2000; 2000WO-US07661
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neurological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human secreted protein BLAST search protein SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ( HUMA - )
                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               e invention relates to the isolation of genes AAC93310-C93354 encoding e human secreted proteins AAB51380-B51423. The genes and proteins are eful for preventing, ameliorating or treating medical conditions, e.g. protein or gene therapy. The genes are isolated from a range of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000-611720/58
secreted protein BLAST search
                                                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                                            1 LYDAK 5
                                                                                                                                                                                                                                                                                                                                                            Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ruben SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          118
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                                                                                                                                                                                                                                                                                                                                                              Conservative
                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0126504.
2000US-0174847.
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                                                                                                                                                                                                                                                                   81
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           infection; human;
                                                                                                                                                                                                                                                                                                                                                                                     .08:
                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                  Score 26;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nootropic;
                                                                                                                                               Ā
                                                                                                                                                                                                                                                                                                                                                            Mismatches
protein SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                  1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secreted protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             is a protein isolated in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        bacterial,
                                                                                                                                                                                                                                                                                                                                                                                                        Length 118;
                                                                                                                                                                                                                                                                                                                                                            Indels
  NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fungal
                                                                                                                                                                                                                                                                                                                                                            0;
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RESULT 8
AAG28475
ID AAG28475
XX AAG2

17-OCT-2000

(first

entry)

AAG28475 standard;

Protein;

Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter

promoter;

Arabidopsis thaliana protein fragment SEQ ID NO: 33705.

Дb Š

77

LYDAK

81

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Query Match
Best Local (
                                                         Matches
                                                                                                                                                                                                                                                    (a) cancer, e.g. breast and ovarian cancer, and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f) infectious diseases such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to the isolation of genes AAC93310-C93354 encoding the human secreted proteins AAB51380-B51423. This sequence represents a peptide fragment homologous to the protein encoded by the gene isolated in the present invention. The sequence is a search result from a BLASTX homology search. The genes and proteins are useful for preventing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiuleer; vulnerary; antionvulsant; antibacterial; antifungal; antiparastito; cardiant; gene therapy; cancer; immune disorder; cardiovascular disord.
                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ameliorating or treating medical conditions, e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant)agonists are useful in the diagnosis, treatment and prevention of:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New nucleic acid molecules encoding diagnosing, preventing, treating or
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07-JAN-2000; 2000US-0174847
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                                                         Conservative
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additives or preservatives
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thes 0;
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18-JUN-1999; 99UU 18-JUN-1999; 99UU 18-JUN-1999; 99UU 21-JUN-1999; 99UU 21-JUN-1999; 99UU 23-JUN-1999; 99UU 23-JUN-1999; 99UU 23-JUN-1999; 99UU 23-JUN-1999; 99UU 23-JUN-1999; 99UU	10-JUN-1999; 99US 16-JUN-1999; 99US 16-JUN-1999; 99US 17-JUN-1999; 99US 18-JUN-1999; 99US	06-MAY 1999 9905 11-MAY 1999 9905 11-MAY 1999 9905 14-MAY 1999 9905 18-MAY 1999 9905 21-MAY 1999 9905 21-MAY 1999 9905 21-MAY 1999 9905 21-MAY 1999 9905 25-MAY 1999 9905 27-MAY 1999 9905 27-MAY 1999 9905 28-MAY 1999 9905 27-MAY 1999 9905 28-MAY 1999 9905 27-MAY 1999 9905 28-MAY 1999 9905 29-JUN 1999 9905 01-JUN 1999 9905 01-JUN 1999 9905 01-JUN 1999 9905	033405-A2. SEP-2000. SEP-2000; 2000EP FEB-1999; 99US MAR-1999; 99US MAR-1999; 99US APR-1999; 99US
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                                                                                                 Protein identification; hybridisation assay; gentermination sequence.
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netic mapping; gene expression control; promoter
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RESULT 10
ABG24830
ID ABG24
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AC ABG24
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DT 18-FE
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KW Human
KW Hood
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                                                                                                                              Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                         Novel
Drmanac RT,
                  (HYSE-) HYSEQ INC
                                  31-MAR-2000;
23-AUG-2000;
                                                          30-MAR-2001; 2001WO-US08631.
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                                                                                                              Homo sapiens
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6 LYDAK 10
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Similarity 100
5; Conservative
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                                  2000US-0540217
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Liu C,
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Buchrieser C, Frangeul L, Couve E, Ru.
Dussurget O, Checouani F, Nedjari H, (
Daniels J, Goebel W, Kreft J, Kuhn M,
Dominguez-Bernal G, Garrido-Garcia P, (
                                                                                                                                                                                                                                 11-APR-2001; 2001WO-FR01118
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                                                                                                                              (INSP ) INST
                                                                                                                                                                                                                                                                                    18-OCT-2001
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                                                                                                                                                                                                                                                                                                                                                                                  Listeria monocytogenes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ftp.wipo.int/pub/published_pct_sequences.
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    gene therapy; vaccine; biosynthesis; biodegradation;
bacterial infection; disease.

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t, Glaser P, Kunst F, Cos
M, Ng E, Vazquez-Boland
, Tierrez-Martinez A, Ame
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monocytogenes and related organisms, and for seduence and fragments of it are useful for selecting probes and primers for detecting genes in L. monocytogenes and related organisms, and for studying genetic polymorphisms and other genomes. The present sequence is a protein encoded by the genome sequence of the present invention. Proteins expressed from the genome sequence are useful for raising specific antibodies, identification of L. monocytogenes and related organisms, and for biosynthesis and biodegradation, especially biosynthesis of Vitamin B12. The genome sequence and proteins encoded by it are also useful for selecting compounds that regulate gene expression and cell replication and modulate L. monocytogenes-related diseases. In addition, the genome sequence and proteins encoded by it are useful in pharmaceutical and vaccines compositions for the treatment or prevention of infections by L. monocytogenes and related organisms.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at fifth wipo.int/pub/published_pct_sequences.
                                                Query Match
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                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present invention relates
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99US-0145086
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990S-0128345.
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PR 11-AUG-1999 99US-0148341.
PR 12-AUG-1999 99US-015440.
PR 12-AUG-1999 99US-015400.
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99US-0162142.
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                                    Mismatches
                                          DB 21;
3.7e+02;
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Search completed: July 11, Job time: 4.86902 secs

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1: /cgn2_6/ptodata/1/

2: /dgn2_6/ptodata/1/

3: /cgn2_6/ptodata/1/

4: /cgn2_6/ptodata/1/
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US-08-611-977-34
US-09-420-909-20
US-08-936-165A-513
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Sequence 10, App	Sequence 12, App.	Sequence 10, Appl	Sequence 2, Appli	Sequence 9, Appli	Sequence 8, Appli	Sequence 7, Appli	Sequence 6, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 3, Appli	Sequence 2, Appli	Sequence 3, Appli	Sequence 4, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 3, Appli	Sequence 11, Appl

ALIGNMENTS

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TELEPHONE: /70	•
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PRIOR APPLICATION DATA:	
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PRIOR APPLICATION DATA:	٠.
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APPLICATION NUMBER: JP 4-212305	••
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CLASSIFICATION: 536	٠.
: 07-JUN-	٠.
APPLICATION NUMBER: US/08/472,659	•••
LICATION DATA:	•••
PatentIr	•••
SYSTEM:	•••
COMPUTER: IBM PC compatible	•••
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COMPUTER READABLE FORM:	
313-1404	
COUNTRY: United States	
Alexandria	•• •
O. Box 1404	• •
ADDRESSEE: Burns, Doane, Swecker & Mathis	• •
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HI, No. 5831030om1	٠.
YAMAICHI, KOZO	٠.
APPLICANT: KURIHARA, Tatsuya	٠.
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: NAKAZATO, Hiros	٠.
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IWASA, Fuyu	•••
APPLICANT: TSUJIMOTO, Masafumi	• •
GENERAL INFORMATION:	
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TYPE: amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: peptide

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; MOLECULE TYPE: US-08-474-661-7
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   Query Match
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GENERAL INFORMATION:
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                                                                                                                                 TELEFAX: (703) 836-66 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/091,028
                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Rel
                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
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                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-
FILING DATE: 17-JUL-1992
                                                                       TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity hes 5; Conserv
                                                                                                                                                                                                                                                    APPLICATION NUMBER: JP 5-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
                                                           TOPOLOGY:
                                                                                                    ENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCES: 34
                                                                                                    5 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      United States
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YAMAICHI, KOZO
YAMAGUCHI, NO. 5874253omi
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NAKAZATO, Hiroshi
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                                                           linear
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                                            peptide
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 100.0%; Score 26;
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Pred. No.
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DB 2;
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Matches 5
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                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                       FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Polonia
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                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/611,977 FILING DATE: 06-MAR-1996
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P.O. Box 1404
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                                                          Conservative
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YAMAICHI, KOZO
YAMAGUCHI, No. 5972886omi
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NAKAZATO, Hiroshi
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                                                                                                                                  peptide
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14-JUL-1993
                                                                                                                                                               single
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); Mismatches 0;
                                                          Score 26; DB 2;
Pred. No. 1.9e+05;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version #1.30
                                                                                     Length 5;
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APPLICANT:

No. 5874253uo

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US-08-474-661-34
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              Sequence 34, Application US/08474661
PAtent NO. 5874253
GENERAL IMPORMATION:
APPLICANT: TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                      Query Match
Best Local Similarity
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Patent No. 5
                                                                                                                                                                                                                        Matches
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: JP 5-0
FILING DATE: 04 MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 14-JUL-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION UMBER: US/08/472,659 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION UMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICANT: TSUJIMOTO, Masafumi
APPLICANT: IWASA, Fuyuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Alexandria
                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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                                                                                                                                                    121 LYDAK 125
                                                                                                                                                                                      1 LYDAK 5
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                                                                                                                                                                                                                                                                                                                                       amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   McGowan, Malcolm K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Virginia
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P.O. Box 1404
                                                                                                                                                                                                                      Conservative
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YAMAGUCHI, NO. 5831030omi
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NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                     100.0%;
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Pred. No. 1.9e+02;
Pred. No. 1.9e+02;
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                                                                                                                                                                                  Patent No. 5972886 GENERAL INFORMATION:
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                                                                                                                                                                                                                 Sequence 34, Application US/08611977
                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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INFORMATION FOR SEQ ID NO:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION WIMBER: US/O8/474,661
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
CLASSIFICATION: 435
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LENGTH: 380 amino acids
TYPE: amino acid
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ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER:
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TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
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               APPLICANT: YAMAGUC
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CITY: Alexandria
STATE: Virginia
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FILING DATE: 14-JUL-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: United States 
ZIP: 22313-1404
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                          MIURA, Kenju
ISHIDA, NO. 5972886uhiro
KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. 5972886omi
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George Mason Bldg., Washington & Prince Sts.
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NAKAZATO, Hiroshi
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YAMAICHI, Kozo
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MEGAKARYOCYTE DIFFERENTIATION FACTOR 34
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Pred. No. 1.9e+0
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CORRESPONDENCE ADDRESS:

ADDRESSEE:

Doane, Swecker & Mathis

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Best Local Similarity
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                                 APPLICATION NUMBER: US 60/
FILING DATE: 01-MAY-1998
INFORMATION FOR SEQ ID NO: 20:
                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                         TITLE OF INVENTION: PREPARAT
TITLE OF INVENTION: HELICASS
NUMBER OF SEQUENCES: 27
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                         PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
US 60/083,942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                  SEQUENCE CHARACTERISTICS:
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LENGTH: 380 amino acids
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FILING DATE: 17-UUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
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APPLICATION NUMBER: US 08/091,028
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MEDIUM TYPE: Floppy disk
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OPERATING SYSTEM: PC-DOS/MS-DOS
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ENGTH:
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.O. Box 1404
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Pred. No. 1.
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                                                                                                                                                         Version #1.30 (EPO)
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TOPOLOGY: 1:
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US-08-936-165A-513
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Best Local Similarity
Tatches 5; Conserve
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; TOPOLOGY: lin
; MOLECULE TYPE:
US-09-300-909-20
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Query Match
Best Local Similarity 80.0
Matches 4; Conservative
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                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                               NAME: Gimmi, Edward R
REGISTRATION NUMBER: 38,891
REFERENCE/DOCKET NUMBER: P5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/0 FILING DATE: 24-SEP-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                           SEQUENCE CHARACTERISTICS:
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                                                                                                TYPE: amino acid
STRANDEDNESS: sin
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STREET: 709 Swedeland
CITY: King of Prussia
                                                                                                                           LENGTH:
                                                                                                                                                                      TELEX:
                                                                                                                                                                                  TELEFAX: 610-270-5090
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                                                                                                                          88 amino acids
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Ward, Judith
VENTION: No. 6348582el Prokaryotic Polynucleotides,
VENTION: Polypeptides and Their Uses
;EQUENCES: 534
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Rosenberg, Martin
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              92.3%;
80.0%;
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 Score 24; DB
Pred. No. 1.2e
1; Mismatches
                                                                                                                                                                                                                          P50549
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Pred. No. 3.
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..2e+02;
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                              DB 4;
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                           Length 88;
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    Indels
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48 MYDAK 52

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RESULT 10
US-08-742-621-1
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                                                                                                                GENERAL INFORMATION:
APPLICANT: CHILLMAN, JENNIFER L.
APPLICANT: COLEMAN, ROGER
TITLE OF INVENTION: NOVEL HUMAN PURINOCEPTOR
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
                                             STREET: 31.
COMPUTER READABLE FORM:
                              COUNTRY:
                                                                                                     ADDRESSEE:
                94304
                                                                                   E: Incyte Pharmaceuticals, Inc. 3174 Porter Drive
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RESULT 12

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US-09-023-023-2
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                                                                                                Query Match
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                                                                 Matches
                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/042,030
FILING DATE: MAICH 27, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Han, William T
REGISTRATION NUMBER: 34,344
REFERENCE/DOCKET NUMBER: GH50013
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5219
                                                                                                                                                                INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 377 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION: APPLICANT: Kristi
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PASTSEQ FOR Windows Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/023,023 FILING DATE: 12-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Interleukin-1 Beta Converting Enzyme Like Apoptosis Pr
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKilne Beecham Corporation
STREET: 709 Swedeland Road
CITY: King of Prussia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
                                                               Local Similarity
nes 4; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                                                                                                                                                                    TELEFAX: 610-270-5090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: PA
                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                  TOPOLOGY:
45 IYDAK 49
                             1 LYDAK 5
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                                                                 Conservative
                                                                                                                                                     linear
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                                                                               92.3%;

    Mismatches

                                                                                 Score 24; DB 3;
Pred. No. 5.3e+02;
                                                               0; Indels
                                                                                               Length 377;
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US-08-742-621-1
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                                                                                                                                                                                   GENERAL
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APPLICANT: Lynch, Kevin J.

APPLICANT: Burgard, Edward C.

APPLICANT: Metzger, Randy E.

APPLICANT: Niforatos, Wende

APPLICANT: Niforatos, Wende

APPLICANT: Touma, Edward B.

APPLICANT: Touma, Edward B.

APPLICANT: Touma, Edward B.

APPLICANT: Touma, Edward B.

APPLICANT: Nucleic Acids Encoding a Functional

TITLE OF INVENTION: Nucleic Acids Encoding a Functional

TITLE OF INVENTION: Human purinoreceptor P2X2 and P2X4 And

TITLE OF INVENTION: And Use Thereof

FILE REFERENCE: 6394 US.P1

CURRENT APPLICATION NUMBER: US/09/191,608

CURRENT APPLICATION OF SEQ ID NOS: 26

CURRENT FILING DATE: 1998-11-13

NUMBER OF SEQ ID NOS: 26
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                                                                                                                                        ; ORGANISM: Homo sapiens US-09-191-608-22
                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 22 LENGTH: 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22, App--
Sequence No. 6242216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                   Matches
                                                                                                    Query Match
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 388 amino acid
                                                                                                                                                                          TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ Version CURRENT APPLICATION DATA:
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                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS: sin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/7. FILING DATE: Filed Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM:
SOFTWARE: FastSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
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218 IYDAK 222
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                                1 LYDAK 5
                                                                   Similarity 4; Conserv
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                                                                   Conservative
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                                                                                   92.3%;
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                                                                 Score 24; DB Pred. No. 5.5e 1; Mismatches
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Pred. No. 5.5e+02;
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                                                            DB 4;
5.5e+02;
0;
                                                                                                  Length 388;
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                                                                                                                                                                                                                                                                                                                                     Sequence 14, Application US/08203905B Patent No. 5646249
GENERAL INFORMATION:
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 2:
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                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                             TITLE OF INVENTION: ISOLATION AND CHARACTERIZATION OF A TITLE OF INVENTION: NOVEL CHAPERONE PROTEIN NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                                                                                                  APPLICANT: KAYE, FEDERIC J.
APPLICANT: OTTERSON, GREGORY A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 471 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 619-235-8550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/203,905B
FILING DATE: February 28, 1994
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA
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TITLE OF INVENTION: ISOLATION AND CHARACTERIZATION OF
TITLE OF INVENTION: NOVEL CHAPERONE PROTEIN
                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: KIRKPATRICK, ANITA M. REGISTRATION NUMBER: 32,617 REFERENCE/DOCKET NUMBER: NII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
APPLICATION NUMBER:
                                   SOFTWARE:
                                                                                                                                                                                                STREET:
                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:

    Application US/08203905B
    5646249

                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96 IYDAK 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 LYDAK 5
                                                                                                                                                                    T: 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR NEWPORT BEACH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4;
              APPLICATION DATA:
                                                                                                                         92660
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   471 amino acids
                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: KNOBBE, MARTENS, OLSON & BEAR 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             619-235-0176
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                             PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92.3%;
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US-09-177-249-236
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US-09-134-001C-4456
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LENGTH: 586
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APPLICANT: Lynn Dou
                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                              Sequence 236, Appl Patent No. 6229064
                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4456, Application US/09134001C Patent No. 6380370
                                                                                                                                                                                                                                                                                                                                                                                  Matches
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APPLICANT: Goldberg, Robert B.
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Development in Plants
FILE REFERENCE: 023070-088120US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/134,001C CURRENT FILING DATE: 1998-08-13 PRIOR APPLICATION NUMBER: US 60/064,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC TITLE OF INVENTION: EPIDERWIDIS FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5674
                                                                                                          APPLICANT:
                                                                                                                            APPLICANT:
                                                                                                                                           APPLICANT:
                                                                                            APPLICANT:
                                                                                                                                                           APPLICANT: Ohad, Nir
                                                                                                                                                                         APPLICANT: Fischer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: GTC-007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 619-235-0176 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: KIRKPATRICK, ANITA M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
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ILECOMMUNICATION THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                              94 MYDAK 98
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                                                                                                                                                                                                                                                                                                                                               1 LYDAK 5
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                                                                                                                                                                                                                                                                                                                                                                                4;
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GY: linear
                                                                                                                          Yadegari, Ramin
                                                                                                                                           Kiyosue, Tomohiro
                                                                                         Harada, John
                                                                                                          Margossian, Linda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          472 amino acids
                                                                                                                                                                                                                            Application US/09177249
                                                                                                                                                                                                                                                                                                                                                                              Conservative
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V: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-11-08
                                                                                                                                                                           Robert L
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80.0%;
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    Mismatches

                                                                                                                                                                                                                                                                                                                                                                                                Score 24; DB 4;
Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 24;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                              Length 586;
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                                                                                                                                                                                                                                                                                                                                                                                0,
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CURRENT APPLICATION NUMBER: US/09/177,249

CURRENT FILING DATE: 1998-10-22

EARLIER APPLICATION NUMBER: US 09/071,838

EARLIER FILING DATE: 1998-05-01

NUMBER OF SEQ ID NOS: 324

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 236

LENGTH: 11

TYPE: PRT

ORGANISM: Arabidopsis sp.

US-09-177-249-236

Query Match
Best Local Similarity 80.0%; Pred. No. 22;

Matches 4; Conservative 1; Mismatches 0; Gaps 0;

Db 1 LYDAK 5

Db 1 LYDAK 5

Db 1 LYDAK 5

Search completed: July 11, 2003, 12:02:10

Search completed: July 11, 2003, 12:02:10
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Result
No.
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Maximum DB
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched
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                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq
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length: 2000000000
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26
1 LYDAK 5
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Match
     445758 seqs,
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Gapop 10.0 ,
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. /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
. /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
. /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
. /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
. /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
. /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
. /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
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1014
1043
88
91
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380
413
430
464
491
567
707
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US-09-738-626-4157
US-10-156-761-14800
US-10-036-9598-9
US-10-156-761-7781
US-10-156-761-7781
US-10-156-761-781
US-10-156-761-789
US-10-156-761-789
US-09-738-626-4656
US-09-738-626-4656
US-09-39-980-513
US-10-156-733-10
US-09-815-733-10
US-09-813-028-77
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US-09-140-719-7
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397.148 Million cell updates/sec
          Sequence 7, Appli
Sequence 34, Appl
Sequence 34, Appl
Sequence 4157, Ap
Sequence 4157, Ap
Sequence 9, Appli
Sequence 2, Appli
Sequence 7891, Ap
Sequence 7899, A
Sequence 15026, A
Sequence 12099, A
Sequence 15026, A
Sequence 15026, A
Sequence 15036, A
Sequence 17, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 17, Appl
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 Sequence
Sequence
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ALIGNMENTS

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Sequence 7, Application Us, Patent No. US20020164711A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                            COUNTRY: United States
ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane,
STREET: P.O. Box 1404
                                                                                                                                                                                                      PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                    APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
ADDITION TOWN NUMBER: 14-JUL-1993
                                                                                                                                                                                                                         APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002 CLASSIFICATION: <Unknown>
                                                                                                                                                    APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MIURA, Kenju
ISHIDA, No. US20020164711a1uhiro
KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. US20020164711a1omi
OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                     APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSUJIMOTO, Masafumi
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NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WASA, Fuyuki
JP 6-067339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US20020164711A1uo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 7:
                                                                                                       APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                   COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                           CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                 PRIOR APPLICATION DATA:
                                                                                      FILING DATE: 14-JUL-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. US20010026931A1omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICATION NUMBER: FILING DATE: 04-MAI
                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Burns, Doa
STREET: P.O. Box 1404
CITY: Alexandria
                                                    APPLICATION NUMBER: JP 4 FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                    APPLICATION NUMBER: US/0 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: peptid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 LYDAK 5
                                                                                                                                                                                                                                                                                                                                                                                 RY: United States 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                 Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09140719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 04-MAR-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCE CHARACTERISTICS:
LENGTH: 5 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MIURA, Kenju
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IWASA, Fuyuki
TSUROUOKA, No. US20010026931A1uo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISHIDA, No. US20010026931A1uhiro
KURIHARA, Tatsuya
                                                                                                                                                                                                                                                                                     PatentIn Release #1.0, Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rSUJIMOTO, Masafumi
 JMBER: JP 6-067339
04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
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                                                                       JP 4-212305
                                                                                                                                                                                                                                                     US/09/140,719
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4e+05;
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (703) 836-202
INFORMATION FOR SEQ ID.NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 5 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
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REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION UMBER: US/10/091,442
FILING DATE: 07-MAT-2002
CLASSIFICATION: <Unknown>
                                                                            ATTORNEY/AGENT INFORMATION:
NAME: McGowan, Malcolm
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                                                                                                                                APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: US 08/091,028
FILING DATE: 17-JUL-1992
FILING DATE: 17-JUL-1992
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                                                                                                               APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Alexandria
                                                        REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Burns,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (703) 836-6620
                                                                          McGowan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TSUJIMOTO, Masafumi
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YAMAICHI, KOZO
YAMAGUCHI, NO. US20020164711Alomi
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NAKAZATO, Hiroshi
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                                                                        Malcolm K.
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Pred. No. 4e+05
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Matches 5; Conserv
                TELEFAX: (703) 836-202
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
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                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                   REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. US20010026931A1omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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                                                                                                                      NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,3
                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/0 FILING DATE: 08-AUG-1998 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Alexandria
                                                                        TELEPHONE:
                                                                                                                                                                                              APPLICATION NUMBER:
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
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380 amino acids
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P.O. Box 1404
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ISHIDA, No. US20010026931Aluhiro
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                                                   (703) 836-2021
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TSUROUOKA, NO. US20010026931A1uo
NAKAZATO, Hiroshi
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                                                                      (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
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04-MAR-1993
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100.0%; Pred. No.
Live 0; Mismatch
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                                                                                                         001560-247
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RESULT 5
US-09-738-626-4157
Connence 4157, Apr
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US-09-738-626-4157
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                                                                                                                                                                                                                                                 US-10-156-761-14800
                                                                                                                                                                                                                                                                   RESULT 6
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Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                             Sequence 14800, Application US/10156761 Publication No. US20030119018A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT FILING DATE: 2002-05-29
                                                                                                                      APPLICANT: OMURA, SATOSHI
APPLICANT: IKEDA, HARUO
APPLICANT: ISHIKAWA, JUN
APPLICANT: HORIKAWA, HIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: JP 00/159162 PRIOR FILING DATE: 2000-04-07 PRIOR APPLICATION NUMBER: JP 00/280988 PRIOR FILING DATE: 2000-08-03
                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: SENOH, AKIHIRO
APPLICANT: IKEDA, WASATO
APPLICANT: OZAKI, AKIO
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2000-08-03
NUMBER OF SEQ ID NOS: 7059
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                                                                                                                                                                                                                                                                                                                      340 LYDAK 344
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                                                                                                                         ISHIKAWA, JUN
HORIKAWA, HIROSHI
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OCHIAI, KEIKO
                                                                                                       SHIBA, TADAYOSHI
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YOKOI, HARUHIKO
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No. US20020197605A1
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                             ; ORGANISM: Salmonella typhi US-09-794-098-2
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US-09-794-098-2
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; ORGANISM: Hevea brasiliensis
US-10-036-959B-9
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US-10-036-959B-9
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                                                                                                   SOFTWARE: PART SEQ ID NO 2
LENGTH: 491
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 9, Application US/10036959B
Publication No. US2003011909BA1
GEMERAL INFORMATION:
APPLICANT: E.I. du Pont de Nemours & Company
APPLICANT: Hallahan, David L.
APPLICANT: Keiper-Hrynko, Natalie
TITLE OF INVENTION: Genes Involved in the Biosynthesis of Isopentenyl Diphosphate in
TITLE OF INVENTION: brasiliensis Latex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/036,959B
CURRENT FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/307,637
PRIOR FILING DATE: 2001-07-25
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Microsoft Office 97
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09794098
Patent No. US20020012668A1
GENERAL INFORMATION:
APPLICANT: Universiti Sains Malay
                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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  Best Local Similarity
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                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/794,098
CURRENT FILING DATE: 2001-02-28
PRIOR APPLICATION NUMBER: PI 2000 0765
PRIOR FILING DATE: 2000-02-28
                                                                                                                                                                                                                                                                                APPLICANT: Universiti Sains Malaysia TITLE OF INVENTION: DNA SEQUENCE ENCODING THE SPECIFIC AND ANTIGENIC OUTER MEMBRANE TITLE OF INVENTION: OF SALMONELLA TYPHI FILE REFERENCE: 4463-005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: JP 2001-272697
PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 15109
                                                                                                                                                                                 NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: CL-1792
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100.0%;
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Score 26; Pred. No.
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Pred. No. 3.3e+02;
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  DB 10;
3.5e+02;
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APPLICANT: SARRKI, YOSHTUKI
APPLICANT: HATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT FILING DATE: 2002-05-29
PRIOR APPLICATION NUMBER: JP 2001-204089
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 15109
SEQ ID NO 7899
LENGTH: 707
TYDEN DET
                                                                          ; ORGANISM: Streptomyces avermitilis US-10-156-761-7899
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Best Local Similarity lov.
"~+~hes 5; Conservative
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PRIOR FILING DATE: 2001-08-02
NUMBER OF SEQ ID NOS: 15109
SEQ ID NO 7781
LENGTH: 567
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Query Match
Best Local Similarity
Matches 5; Conserv
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APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL FOLYNUCLEOTIDES
FILE REFERENCE: 249-262
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APPLICANT: HORIKAWA, HIROSHI
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HORIKAWA, HIROSHI
SHIBA, TADAYOSHI
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100.0%; Score 26; DB 9; ilarity 100.0%; Pred. No. 5.1e+02; Conservative 0; Mismatches 0;
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Pred. No. 4.1e+02
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   Indels
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APPLICATION UNMBER: 60/257,931
PRIOR APPLICATION UNMBER: 60/257,931
PRIOR APPLICATION UNMBER: 60/257,931
PRIOR APPLICATION NUMBER: 60/259,308
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APPLICANT: IKEDA, HARUO
APPLICANT: ISHIKAWA, JUN
APPLICANT: HORIKAWA, HIROS
APPLICANT: SHIBA, TADAYOSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 12209, Application US/09815242 Patent No. US20020061569A1 GENERAL INFORMATION:
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SEQ ID NO 15026
LENGTH: 712
TYPE: PRT
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Best Local :
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CURRENT FILING DATE: 2002-05-29
PRIOR APPLICATION NUMBER: JP 2001-204089
PRIOR FILING DATE: 2001-05-30
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APPLICANT: HORIKAWA, HIROSHI
APPLICANT: SHIBA, TADAVOGHI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HAATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-262
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109 5; Conservation
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Trawick, John D.
                                                                                                                                                                                                                                                                                                                                                                                                   Yamamoto, Robert T.
Xu, H. Howard
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Pred. No.
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NUMBER OF SEQ ID NOS: 7059
SOFTWARE: Patentin ver. 3.0
SEQ ID NO 4656
LEGEL 1014
TYPE: PRT
                                                                                                          RESULT 14
US-10-242-056-61
; Sequence 61, Application US/10242056
; Publication No. US20030113323A1
; GENERAL INFORMATION:
; APPLICANT: Ensign, Jerald C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; PRIOR FILING DATE: 2001-02-16; NUMBER OF SEQ ID NOS: 14110; SOFTWARE: FastSEQ for Windows Version 4.0; SEQ ID NO 12209; LENCTH: 745
TYPE: PRT; ORGANISM: Staphylococcus aureus US-09-815-242-12209
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US-09-738-626-4656
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APPLICANT: OZAKI, AKIO

TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES

FILE REFERENCE: 249-125

CURRENT APPLICATION NUMBER: US/09/738,626

CURRENT FILING DATE: 2000-12-18

PRIOR APPLICATION NUMBER: JP 99/377484

PRIOR APPLICATION NUMBER: JP 99/377484

PRIOR FILING DATE: 1999-12-16

PRIOR FILING DATE: 2000-04-07

PRIOR FILING DATE: 2000-04-07
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Best Local Similarity
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Best Local Similarity
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TATEISHI, NAOKO
SENOH, AKIHIRO
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OCHIAI, KEIKO
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Ensign, Jerald C
Bowen, David J
Petell, James
Fatig, Raymond
Schoonover, Sue
ffrench-Constant, F
Orr, Gregory L
Merlo, Donald J
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                                    Richard
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Pred. No. 5.3e+02;
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US-09-939-980-513
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; MOLECULE TYPE:
US-10-242-056-61
                                                                                                                                                                Sequence 513, Application | Patent No. US20020082234A1 GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 61:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/705,484
FILING DATE: 28-AUG-1996
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LENGTH: 1043 amino aci
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APPLICATION NUMBER: US 08/743,699
FILING DATE: 06-NOV-1996
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FILING DATE: 06-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/608,423
FILING DATE: 28-FEB-1996
PRIOR ADDITICATION TO THE STATEMENT OF THE STATEMEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 50
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/063,615
FILING DATE: 18.MAY-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/395,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 9330 Zionsv
CITY: Indianapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
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                                                                                                                                 APPLICANT:
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9330 Zionsville Road
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                           Hodgson,
Knowles,
                                                                                                                              Black, Michael
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Lonetto,
                                                                                           Burnham,
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Michael
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                                  David
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Pred. No. 7.5e+02;
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Search completed: July 11, Job time: 2.4657 secs
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                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                              TELEX: «Unknown»
INFORMATION FOR SEQ ID NO: 513:
SEQUENCE CHARACTERISTICS:
LENGTH: 88 amino acids
                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: Protein
SEQUENCE DESCRIPTION: SEQ ID NO: 513:
                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/939,980
FILING DATE: 27-Aug-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline
STREET: 709 Swedeland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/936,165
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: No. US20020082234A1el Prokaryotic Polynucleotides,
Polypeptides and Their Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                     48 MYDAK
                                                                                                     1 LYDAK 5
                                                                                                                                        4.
                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 610-270-44
TELEFAX: 610-270-5090
                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Gimmi, Edward R REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 19406-0939
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: King of Prussia
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                                                                                                                                        Conservative
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Ward, Judith
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                                                                                                                                                                                                                                                                                                                                                                                                       610-270-4478
                                                                                                                                                        92.3%;
80.0%;
                2003, 12:37:34
                                                                                                                                        1;
                                                                                                                                                        Score 24; DB 10;
Pred. No. 1.8e+02;
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                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                          P50549
                                                                                                                                                                         Length 88
                                                                                                                                        Indels
                                                                                                                                        0;
                                                                                                                                        Gaps
                                                                                                                                        0;
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: July 11, 2003, 11:45:06; Search time 1.00832 Seconds (without alignments) . 476.708 Million cell updates/sec

Title: Perfect score: Sequence: US-10-091-442-7 26 1 LYDAK 5

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters:

283224

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	2 2 0 8	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	000	7	o	. 0	•	· Lu	N	–	Result No.	
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t L	54	526	512	491	491	475	474	450	443	439	439	421	408	401	356	341	326	304	301	281	277	259	253	253	199	197	178	117	Length	
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A90233	,0	G71081	B82433	AB0890	S70190	T27811	T09688	150631	A27793	AF3148	E98139	н89916	S57148	150679	E75266	B83298	T15194	C90453	G97187	T50351	S73522	G81427	AF1423	79	T24871	в71106	H70345	S41811		000
nypotnetical prote	proph	e helica	ic glycero	r membrane pr		hypothetical prote		s protein	_		l pro	O1	thetical pr	protein	-	-		hypothetical prote	DP-gluco			Γ.	Partition protein,	0	prot	cal prot	nserved hypothe	Ig kappa chain V r	criptio	

C;Genetics: A;Gene: aq_507

Query Match 100.0%; Score 26; Best Local Similarity 100.0%; Pred. No.

DB 2; Length 178; 56;

45	44	43	42	41	40	39	38	37	36	3 5	34	33	32	31	30
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100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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E70021	S76977	A89770	AF2001	S64998	T46228	E95320	ZZZRNQ	S36523	н95932	W1WL35	G95853	D83473	G69769	S52694	в90476
3-hydroxyacy1-coa	pleD-4 protein - S	•		hypothetical prote	hypothetical prote	adenylyl-sulfate k	adenylyl-sulfate k	El protein - human	probable adenylyl-	El protein - human	probable pyruvate	isocitrate dehydro	pyruvate oxidase h	asparagine synthas	hypothetical prote

ALIGNMENTS

celle: The V(kappa) genes of ference number: \$41809; MUI bession: \$41811 lecule type: DNA sidues: 1-117 <hub> SS: references: EMBL:X72816 lecule type: DNA sidues: 1-117 <hub> SS: references: EMBL:X72816 lecule type: DNA lecule type:</hub></hub>	RESULT 1 S41811 Ig kappa chain V region L22 - human C; Species: Homo sapiens (man) C; Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 21-Jul-2000 C; Accession: S41811 R; Huber, C.; Schaeble, K.F.; Huber, E.; Klein, R.; Meindl, A.; Thiebe, R.; Lamm, R.; Eur. J. Immunol. 23, 2868-2875, 1993
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A; Note:
C; Geneti
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T24871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Species: Pyrococcus horikoshii
C; Date: 14-Aug-1998 #sequence_re
C; Accession: B71106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothetical protein T12G3.5 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #t.C;Accession: T24871 R;Sims, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Title: Complete sequence and gene organization of the genome of a hyper-thermophilic A;Reference number: A71000; MUID:98344137; PMID:9679194
A;Accession: B71106
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Kawarabayasi, Y.; Sawada, M.; Ohfuku, Y.; Funahashi, DNA Res. 5, 55-76, 1998
Partition protein, ParA homolog [imported] - Listeria innocua (strain Clip11262) C;Species: Listeria innocua (C;Species: Listeria innocua C;Species: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 17-May-2002 C;Accession: AD1797
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A; Introns: 45/1; 166/3
C; Superfamily: Caenorh
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A; Residues: 1-197 <KAW>
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A; Residues: 1-199 <WIL>
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A; Accession: T24871
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                                                                AD1797
                                                                               RESULT 5
                                                                                                                                                                                                                                                                                                          A; Gene: CESP:T12G3.5
                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: EMBL:Z68752; PIDN:CAA92984.1; GSPDB:GN00022; CESP:T12G3
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Best Local S
Matches 5
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                                                                                                                                134 LYDAK 138
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                                                                                                                                                                                                                                                         Caenorhabditis elegans hypothetical protein T12G3.
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                                                                                                                                                                                            Score 26; DE
Pred. No. 63;
0; Mismatches
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Pred. No.
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63;
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R; Glaser,
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AF1423
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D.; Jones, L.M.; Karst, U.
Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Maduenc ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AD1797 .; Dominguez-Bernal, G.; Local Similarity P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloec uez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, 1 LYDAK 5; regulatory protein spo0J Conservative 5 100.0%; Duchaud, 0; Score 26; Pred. No. Mismatches 2; 0; G.; Madueno, E.; uez-Boland, J.A.; Indels 0 Maitournam, Voss, H.; W 0 m, A.; Wehla

231 LYDAK 235

ParA homolog parA [imported] - Listeria monocytogenes (strain

EGD-

D: JONES, L.M.; Karst, U.
D: JONES, L.M.; Karst, U.
Science 294, 849-852, 2001
A; Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapka
A; Authors: Kreft, J.; Simoes, N.; Tierrez, A.; Ve
ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Ve
A; Title: Comparative genomics of Listeria species A; Gene: parA C; Superfamily: A;Cross-references: GB:NC_003210; PIDN:CAD01004.1; PID:g16412291; GSPDB:GN00177 A;Experimental source: strain EGD-e A; Molecule type: DNA A; Residues: 1-253 <GLA> A; Reference number: AB1077; A; Accession: AF1423 C;Species: Listeria monocytogenes
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change A; Status: preliminary R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berc., Dominguer-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, Query Match Best Local Accession: AF1423 Genetics: 1 LYDAK 5 Similarity 5; Conser regulatory Conservative 235 100.0%; protein 0 spolJ Score 26; Pred. No. Mismatches F.; Kurapkat, G.; Maduenc
rrez, A.; Vazquez-Boland, 82; DB 2 0; G.; Madueno, Length 253; Indels J.A.; 17-May-2002 0; Berche, P.; tian, K.D.; Gaps Maitournam, Voss, H.; W 0, Wehla A

periplasmic protein Cj0111 (imported) - Campylobacter jejuni (strain NCTC 11168) C; Species: Campylobacter jejuni (c; Species: Campylobacter jejuni (c; Species: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 03-Jun-2002 C; Accession: G81427 R.; Mungall, K.; Ketley, J.M.; Churcher, C.; Basham, D.; C.W.; Quail, M.; Rajandream, M.A.; Rutherford, K.M.; VanVliet, A.; Whitehead, S.; Rature 403, 665-668, 2000 A; Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reve A; Reference number: AB1250; MUID:20150912; PMID:10688204 A; Accession: G81427 A; Acterics: G81427 jejuni reveals D.; Chil 1, S.; Bar



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R;Himmelreich, R.; Hilbert, H.; Plagens, H.; Pirkl, E.; Li, B.C.; Herrmann, R. Nucleic Acids Res. 24, 4420-4449, 1996
A:Title: Complete sequence analysis of the genome of the bacterium Mycoplasma A;Reference number: S73327; MUID:97105885; PMID:8948633
A:Accession: S73522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C:Species: Mycoplasma pneumoniae
A:Variety: ATCC 29342
A:Variety: ATCC 29342
C:Date: 27-Feb-1997 #sequence_revision 25-Apr-1997 #text_change 07-Dec-1999
C:Accession: S73522
                                                                                                                                                                                                                                                                                                                                                 probable methyltransferase [imported] - fission yeast (Schizosaccharomyces pombe) C;Species: Schizosaccharomyces pombe C;Date: 09-Jun-2000 #sequence_revision 09-Jun-2000 #text_change 09-Jun-2000 C;Accession: T50351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:AL139074; GB:AL111168; NID:q6967505; PIDN:CAB72595.1; PID:q696760; A;Experimental source: serotype O2, strain NCTC 11168 C;Genetics:
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                                                                                                                                                                                A; MoLecule type: DNA
A; Residues: 1-281 <SEE>
A; Residues: 1-281 <SEE>
A; Cross-references: EMBL.AL157918; PIDN:CAB76043.1;
A; Experimental source: strain 972h(-); cosmid c21C3
                                                                                                                                                                                                                                                                                                                R; Seeger, K.; Harris, D.; Lyne, M.; submitted to the EMBL Data Library,
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T50351
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C; Superfamily: |
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A; Residues: 1-277 <H
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N:Alternate names: hypothetical protein E09_orf277
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A; Residues: 1-259 < PAR>
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1 LYDAK 5
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Pred. No. 84;
); Mismatches
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Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                                              Rajandream, M.A.;
February 2000
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                                    Mismatches
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RESULT 12
T15194
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A;Description: Sulfolobus Solfataricus complete genome.
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C90453
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C; Superfamily:
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                R;Pauley, A.; Gattung, S. submitted to the EMBL Data Library, May 1997 A;Description: The sequence of C. elegans cosmid F55A12
                                                                                           hypothetical protein F55Al2.2 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #te
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C;Accession: C90453
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C;Accession: G97187
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UDP-glucose 4-epimerase [imported] - Clostridium acetobutylicum
C; Species: Clostridium acetobutylicum
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A; Accession: C90453
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A; Residues: 1-301 <KUR>
A;Reference number:
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Best Local
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5; Conserv
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Pred. No.
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Pred. No.
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                                                                                                 20-Sep-1999 #text_change
                                                                                                                                                                                                                                                                                                                                        DB 2;
1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ა</u>
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                                                                                                   24-Nov-1999
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goc, H.P.; Redder
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A;Reference number: A82950; MUID:20437337; PMID:10984043
A;Accession: B83298
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-341 <STO>
A;Cross-reference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-326 <PAU>
A;Cross-references: EMBL:AF003130; NID:g2088663; PID:g2088670; PIDN:AAB54128.1; GSPDB:GN
A;Experimental source: Strain Bristol N2; clone F55A12
C;Genetics:
A;Gene: CESP:F55A12.2
A;Map position: 1
A;Introns: 39/2; 121/1; 165/3; 241/1
C;Superfamily: Caenorhabditis elegans hypothetical protein F55A12.2
                                            A;Map
                                                                                                                                                                                                               A;Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans A;Reference number: A75250; MUID:20036896; PMID:10567266 A;Accession: E75266
                                                                                                                                                                                                                                                                             R;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              conserved hypothetical protein PA2771 [imported] - Pseudomonas aeruginosa (; C; Species: Pseudomonas aeruginosa C; Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 31-Dec-2000 C; Accession: B83298 R; Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hicladman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larl
                                                                                                         A;Cross-references: GB:AE002079; A;Experimental source: strain R1
                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-356 <WHI>
                                                                                                                                                                                         A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                   C; Accession: E75266
                                                                                                                                                                                                                                                                                                                                                                                       C; Species: Deinococo
C; Date: 03-Dec-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GB
A;Experimental source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
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ce: strain PAO1
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  100.0%;
                                                                                                                             GB:AE000513; NID:g6460315; PIDN:AAF12040.1; PID:g64603
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Pred. No.
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Length 356;
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T.; Zalewski, C.;
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A.; Larbig,
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K.; Lim,
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C;Species: Gallus gallus (chicken)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
C;Accession: I50679; S58355
R;Sawada, K; Agata, S.K; Eguchi, G.; Quinlan, R.A.; Maisel, H.
Curr. Eye_Res. 14, 545-553, 1995
                                                                            В
                                                                                                            Qγ
                                                                                                                                                                                                                                 A; Gene: CP49
C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: EMBL:X84806; NID:g953184; PIDN:CAA59271.1; PID:g4377562
R;Agata, S.K.; Eguchi, G.; Quinlan, R.A.; Maisel, H.
submitted to the EMBL Data Library, Pervary 1995
A;Description: The predicted structure of chick lens CP49 and a variant therof, CP491
Search completed: July 11, Job time: 3.10832 secs
                                                                                                                                                                                                                                                                                     A;Molecule type: mRNA
A;Residues: 1-217,'A',219-379,'H',381-401 <AGA>
A;Cross-references: EMBL:X84806; NID:g953184; PIDN:CAA59271.1; PID:g1334742
                                                                                                                                                                                                                                                                                                                                                                 A; Reference number: A; Accession: $58355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 1-401 <SAW>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Title: The predicted structure of chick lens CP49 and A; Reference number: I50631; MUID:96066015; PMID:7587300
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Matches
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B
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DCHS_LACS3
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RLAO_PLAFB
TRMU_RICPR
V181_FOWPV
TRMU_RICCN
ICED_BOVIN
ICED_BOVIN
ICED_HUMAN
VG68_HSVII
DH64_PSVII
DH64_PSVII
DH64_PSVII
DH64_PSVII
DH64_PSVII
DH64_RSVII
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SPB7_HUMAN
YJ95_YEAST
MCRB_METVA
TOLC_SALEN
BCHB_RHOGE
ASN1_YEAST
VE1_HPV35
                                                                                                                                                                                                                                                    NODQ_RHIME
NCA1_CHICK
P152_YEAST
YH64_ETYN3
Y418_METJA
XDHB_ECO57
XDHB_ECOLI
PNAD_MOUSE
              HDA4_HUMAN
RPOB_TREPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
              Q54001
Q9400
Q9400
P13420
P134420
P13590
P13590
P13685
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Q46860
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O75635 homo sapie
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0 human papil
2 r nodq bifu
0 gallus gall
5 saccharomyc
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0 rickettsia
1 bos taurus
1 homo sapien
8 ictalurid h
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1 methanococc
5 escherichia
0 escherichia
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homo sapien
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treponema p
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pseudomonas
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Pram: PF00938; Lipoprotein_3; 1.
ProDom: PD003276; Lipoprotein_3; 1.
PROSITE: PS00013; PROKAR_LIPOPROTEIN; 1.
Hypothetical protein; Lipoprotein; Membrane;

InterPro; IPR001595; Lipoprotein_3.
Pfam; PF00938; Lipoprotein_3; 1.

EMBL; AE000020; AAB95844.1; -

RESULT 2 SPB7_HUMAN

밁 Qy

85 LYDAK 1 LYDAK 5 Similarity
5; Conserv

89

Query Match Best Local S Matches 5

Conservative

100.0%; Score 26; DR 100.0%; Pred. No. 39; Live 0; Mismatches

SEQUENCE CHAIN

LIPID

POTENTIAL.

Signal;

MW;

HYPOTHETICAL LIPOPROTEIN MG440 HOMOLOG 1.
N-ACYL DIGLYCERIDE (POTENTIAL).
; Al7DC45BED6D3065 CRC64;

DB 1; Length 277;

0;

Indels

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Complete proteome.

CC or send an email to in	entities requires a	modified and this sta	the European Bioinfor	betv		SIMILARITY:	CC -!- SUBCELLULAR LOCATION: Attached	Nucleic Acids Res.		Herrmann R.;	-	STRAIN-ATCC 29342	RP SEQUENCE FROM N.A.	Bacteria; Firmicutes;		DE Hypothetical lipoprotein MG440	16-00T-2001 (Rel. 35,	01-NOV-1997 (Rel. 35,	AC P75151;	Y44A_MYCPN ID Y44A_MYCPN STANDARD:	RESULT 1		3 88.5	23 88.5	23 88.5	23 88.5	23 88 5	39 23 88.5 295	23 88.5	23 88.5	23 88.	24 92.3 1	
Licenseeisb-Sib.cn).	agreement (See	tement is not removed. Usage by an	Institute. There	titute of Bioinformatics and the	is converght. It is produced thro	TO THE MG439 / MG440 FAMILY.	to the membrane by	96).	of the genome of the	30000	PubMed=8948633; hert H Plagens H Dirk E Li B	29;		Mollicutes; Mycoplasmataceae; Myc	1	homolog 1 precursor	Last sequence update)			D; PRT; 277 AA.		ALIGNMENTS	1 YB04_AQUAE	1 1A1D_PYRHO	1 DCHS_CLOPE	1 VG53_HSVI1	1 PRIS ROOLT	1 DAPF_METJA	1 Y777_METJA	1 ADDR BACKII	1 AMD1_CHICK	1 HAP1_HAEIN	
		and for commercial	crictions on	rmatics and the EMBL outstation -	ough a collaboration		a lipid anchor		bacterium Mycoplasma					Mycoplasma.		(E09 orf277).							067189 aquifex aeo				075794 escherichia	Q58519 methanococc	methanoc	POISS mus musculu		haemop	

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RESULT 3
YJ95_YEAST
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Best Local
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O75635;
15-JUN-2002 (Rel. 41, C
15-JUN-2002 (Rel. 41, L
15-JUN-2002 (Rel. 41, L
  YJ95_YEAST
P47160;
O1-FEB-1996
O1-FEB-1996
                                                                                                                                                                                                                             Serpin; S
ACT_SITE
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                       the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-slb.ch/announce/or send an email to license@isb-slb.ch).
                                                                                                                                                                                                                                 PROSITE; PSUUZB4; Suntannibitor.
Serpin; Serine protease inhibitor.
Serm SITE 347 348 REACT
                                                                                                                                                                                                                                                                   Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tsujimoto M., Tsuruoka N., Ishida N., Kurihara T., Iwasa F., Yamashiro K., Rogi T., Kodama S., Katsuragi N., Adachi M., Katayama T., Nakao M., Yamashik K., Hashino J., Haruyama M., Miura K., Wakanishi T., Nakazato H., Teramura M., Mizoguchi H., Yamaguchi N.; "Purification, CDNA cloning, and characterization of a new serpin with megakaryocyte maturation activity."; Diol. Chem. 272:15373-15380(1997).
                                                                                                                                                                                                                                                                                                                                       HSSP; P05619; 1HLE.
Genew; HGNC:13902; SERPINB7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Miyata T., Nangaku M., Suzuki D.,
Okubo K., Kurokawa K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-Mesangial cells;
MEDLINE-98376492; PubMed-9710452;
                                                                                                                                                                                                                                                                                                                                                       EMBL; D88575; BAA31232.1;
EMBL; AF027866; AAC64506.1
HSSP; P05619; 1HLE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "A mesanglum-predominant gene, megsin, 1gA nephropathy", 102:828-836(1998). -I- FUNCTION: Might function as an inh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE-97326116; PubMed-9182567;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                 InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       its action as a serpin.
SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
TISSUE SPECIFICITY: Predominantly expressed in mes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE SPECIFICITY: Predominantly expressed in mesangial cells SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION: Might function as an inhibitor oproteases. Might influence the maturation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SWISS-PROT entry is copyright. It is produced through a sen the Swiss Institute of Bioinformatics and the EMBJ
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the Euro
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01-AUG-1988
15-JUN-2002
                                                                                                   This
                                                                                                                                                                                                                                                                                                                    "Structure and expression of the genes, mcrBDCGA, which encous units of component C of methyl coenzyme M reductase in Methanococcus vannielii.",

Proc. Natl. Acad. Sci. U.S. A. 84:3992-3996(1987)

-!- FUNCTION: Reduction of methyl-coenzyme M (2-(methylthio) ethanesulfonic acid) with 7-mercaptoheptanoylthreonine p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Saccharomyces cerevisiae (Bake Eukaryota; Fungi; Ascomycota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR001026; ENTH. Pfam; PF01417; ENTH; 1. SMART; SM00273; ENTH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rose M., Koetter P., Submitted (SEP-1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
Cram D.S., Sherf B.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methanococcus vannielii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
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NCBI_TaxID=4932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Reeve J.N.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=2187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Archaea; Euryarchaeota;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Methanococcaceae;
                                             s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                        to methane and an heterodisulfide.

CATALYTIC ACTIVITY: CH(3)-S-COM + H-S-HTP = COFACTOR: THE ENZYME COMPLEX BINDS TIGHTLY (
TO TWO MOLECULES OF COENZYME F430. F430 IS A
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zyme M reductase beta subunit (EC
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statement is not removed
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                                                                                                     SIGNAL
                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                          VIRULENCE IN BALB/C mice.";

MOI. Microbiol. 17:701-712(1995).

FUNCTION: REQUIRED FOR PROPER EXPRESSION OF OUTER MEMBRANE PROTEIN GENES SUCH AS OMPF, NMPC, PROTEIN 2, HEMOLYSIN, COLICIN V, OR COLICIN E1. MAY BE SPECIALIZED FOR SIGNAL SEQUENCE INDEPENDENT, EXTRACELLULAR SECRETION IN GRAM-NEGATIVE BACTERIA.

1- SUBCELLULAR LOCATION: OUTER membrane.
                                                                                                                                                                                                                                                                                                                                                                                                   Stone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOLC_SALEN STANDARD; PRT; 491 AA (54001; 01-NOV-1997 (Rel. 35, Last sequence update) 01-NOV-1997 (Rel. 35, Last annotation updat
                                                                                                                                                                                              use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See or send an email to license@isb-sib.ch).
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                                                                                         SEQUENCE
                                                                                                                             Transport;
                                                                                                                                       InterPro; IPR003423; OEP. Pfam; PF02321; OEP; 2.
                                                                                                                                                                                                                                                                                                                                                                                     Stone B.J., Miller V.L.; Salmonella enteritidis has a homologue of tolc
                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-96111490; PubMed-8801424;
                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Salmonella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Salmonella enteritidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Outer membrane
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Methanogenesis; Oxidoreductase.
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400 LYDAK 404
                                                                                                                                                              U25178; AAC43973.1;
P02930; 1EK9.
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5; Conserv
                    1 LYDAK 5
                                                                                         Outer membrane; Signal.

1 24 BY SIMILARITY.

25 491 OUTER MEMBRANE PROTEIN TOLC.
25 491 SBF0FB64C0257FA4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            equires a license agreement (See http://www.isb-sib.ch/announce/email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     443 AA;
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Best Local S
Matches 5
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16-OCT-2001
16-OCT-2001
15-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LT 6
_RHOGE
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"Horizontal transfer of the photosynthesis gene cluster and operation of the protection of the protection.";

J. Mol. Evol. 52:33-341(2001).

-i- FUNCTION: Uses Mg-ATP and reduced ferredoxin to reduce ring I protechlorophyllide (Pchilde) to form chlorophyllide a (Chlide).

-i- SIBINIT: FINCTION: Uses Mg-ATP and reduced ferredoxin to reduce ring I protechlorophyllide a protechlorophyllide a (Chlide).

-i- PATHWAY: Light-independent bacteriochlorophyll biosynthesis.

-i- SIBINIT: PROTECHLOROPHYLLIGHT reductase is thought to be composed three subunits; both, both and boths. Could form a heterotetramer of two boths and two boths subunits.

-i- SIMILARITY: BELONGS TO THE CHLB / BCHB / BCHZ FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
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16-OCT-2001 (Rel. 40, Last sequence update)
15-UN-2002 (Rel. 41, Last annotation update)
Light-independent protochlorophyllide reductase
(EC 1.18.-.-) (LI-POR subunit B) (DPOR subunit B
                                                                                                  01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Asparagine synthetase [glutamine-hydrolyzing]
(Glutamine-dependent asparagine synthetase 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oxidoreductase; PhoseQUENCE 543 AA;
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MEDLINE=21240759; PubMed=11343129;
Saccharomycetales;
NCBI_TaxID=4932;
                                            Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
                                                                                                                                                                                                                  ASN1_YEAST
P49089;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00148; oxidored_nitro; 1 TIGRFAMs; TIGR01278; DPOR_BchB;
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5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1278; DPOR_BchB; 1.
Photosynthesis; Bacteriochlorophyll biosynthesis
aA; 58697 MW; 76ADF68BA2C1D067 CRC64;
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                          Saccharomycetaceae;
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tent is in
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L outstation -
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RESULT 8
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ID VE1_H
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XX MEDLINE-5288C / AB972;
XX MEDLINE-97313271; PubMed-9169875;
XX Maraujo R., Aparicio A., Barrell B.G., Badcock K., Benes V.,
XX Hotstein D., Bowman S., Bruckner M., Carpenter J., Cherry J.M.,
XX Loung E., Churcher C.M., Coster F., Davis R.W.,
XX Dietrich F.S., Delius H., DiPaolo T., Dubois E., Duesterhoeft A.,
XX Dietrich F.S., Delius H., DiPaolo T., Dubois E., Duesterhoeft A.,
XX Dietrich F.S., Delius H., DiPaolo T., Dubois E., Duesterhoeft A.,
XX Dietrich F.S., Homan K., Johnston M., Fritz C., Goffeau A.,
XX Hunicke-Smith S., Hyman R., Johnston M., Kalman S., Kleine K.,
XX Marathe R., Messenguy F., Mewes H.-W., Mirtipati S., Moestl D.,
XX Mueller-Auer S., Namath A., Nentwich U., Oefner P., Pearson D.,
XX Mueller-Auer S., Namath A., Nentwich U., Oefner P., Pearson D.,
XX Mueller-Auer S., Namath A., Schoreder M., Scharfe M.,
XX Mueller-Auer S., Namath A., Wentwich U., Oefner P., Pearson D.,
XX Mueller-Auer S., Namath A., Wentwich U., Oefner P., Pearson D.,
XX Mueller-Auer S., Namath A., Wentwich U., Oefner P., Pearson D.,
XX Mueller-Auer S., Namath A., Wentwich U., Schafer M., Scharfe M.,
XX Mueller-Auer S., Wambutt R., Wang Y., Wedler E., Wedler H., Winnett E.,
XX Malsh S. V., Wambutt R., Wang Y., Wedler E., Wedler H., Winnett E.,
XX Malsh S., Schoreder M., Schoreder H., Winnett E.,
XX Malsh S., Wang Y., Wedler E., Wedler H., Winnett E.,
XX Malsh S., Wang Y., Wedler E., Wedler H., Winnett E.,
XX Malsh S., Schoreder M., Schoreder M., Schoreder M.,
XX Malsh S., VO D. H., Hani J.,
XX Malsh 
  VE1_HPV35
P27220;
01-AUG-1992
01-JUN-1994
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INIT_MET
ACT_SITE
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MEDLINE=97109535; PubMed=8951815;

Dang V.D., Valens M., Bolotin-Fukuhara M., Daignan-Fornier B.;

"Cloning of the ASN1 and ASN2 genes encoding asparagine synthetases in Saccharomyces cerevisiae: differential regulation by the CCAAT-box- binding factor.";

Mol. Microbiol. 22:681-692(1996).
                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          use by non-profit institutions as long modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the El the European Bioinformatics Institute. There are no rest
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diphosphate + L-asparagine + L-glutamate.
-!- PATHWAY: Asparagine biosynthesis.
-!- SIMILARITY: CONTAINS 1 TYPE-2 GLUTAMINE AMIDOTRANSFERASE DOMAIN.
-!- SIMILARITY: TO OTHER ASN SYNTHETASES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "The nucleotide sequence of Saccharomyces cerevisiae chromosome XVI.";
Nature 387:103-105(1997)
-i- CATALYTIC ACTIVITY: ATP + L-aspartate + L-glutamine = AMP +
diphosphate + L-asparagine + L-glutamate.
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                                                                                                                                                                                                                                                                                                                                                                                                                            ligase; Asparagine biosynthesis; Glutamine amidotransferase;
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rPro; IPR001962; Asn_synthase.
rPro; IPR000583; GATase_2.
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U40829; AAB68284.1;
P22106; ICT9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PF00310; GATase_
PF00733; Asn_syn
                                                                                                                                                                                                                1 LYDAK 5
                                                                                                                                                                                                                                                        Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                00733; Asn_synthase; 1. PS00443; GATASE_TYPE_II;
                                                                                                                                                                                                                                                                                                                                                                                                      family.
                                                                                                                                                                                                                                                                                                                                             571 AA;
    (Rel.
                                                                                                                                                                                                                                                          Conservative
                                                                 STANDARD;
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29,
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GATASE (BY SIMILARITY)
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; Mismatches
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NODQ_RHIME P13442; 01-JAN-1990 01-JAN-1990

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-92124753; PubMed-1310198; Marich J.E., Pontsler A.V., Rice S. "The phylogenetic relationship and human papillomavirus type 35."; Virology 186:770-776(1992).
                                                                                                                                                                                                                                                                         Pfam;
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PIR; A40824; W1WL35.
PIR; S36523; S36523.
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MEDLINE-94265501; PubMed-8205838;
Delius H., Hofmann B.;
"Primer-directed sequencing of hu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: ATP-DEPENDENT DNA HELICASE REQUIRED FOR INITIATION OF VIRAL DNA REPLICATION. IT FORMS A COMPLEX WITH THE VIRAL E2 PROTEIN. THE E1-E2 COMPLEX BINDS TO THE REPLICATION ORIGIN WHICH CONTAINS BINDING SITES FOR BOTH PROTEINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBCELLULAR LOCATION: Nuclear.
 499
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PF00524; E1_N;
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LYDAK
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DPVS -> SSV (IN REF. 2).

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Barnett M.J., Fisher R.F., Jones T., Komp C., Abola A.P.,
A Barloy-Hubler F., Bowser L., Capela D., Galibert F., Gouzy J.,
A Gurjal M., Hong A., Huizar L., Hyman R.W., Kahn D., Kahn M.L.,
A Kalman S., Keating D.H., Palm C., Peck M.C., Surzycki R., Wells D.H.
A Yeh K.-C., Davis R.W., Federspiel N.A., Long S.R.;
"Nucleotide sequence and predicted functions of the entire
Sinorhizobium meliloti pSymA megaplasmid.";
If proc. Natl. Acad. Sci. U.S.A. 98:9883-9888 (2001).
C -I- FUNCTION: PROPOSED TO PROVIDE ACTIVATED SULFATE FOR TRANSFER TO
NOD FACTOR. ATP SULFURYLASE MAY BE THE GTPASE, REGULATING ATP
C SULFURYLASE ACTIVITY (BY SIMILARITY).
C -I- FUNCTION: APS KINASE CATALYZES THE SYNTHESIS OF ACTIVATED SULFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rosenberg C.;
"The Rhizobium meliloti host range shares homology with translation elshares homology 3:745-755(1989).
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                                                                                                               EMBL; X14809; CAA32914.1; -.
EMBL; M68858; AAA26343.1; -.
EMBL; AE007237; AAK65127.1;
PIR; S14899; ZZZRNQ.
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Nucleotide sequence and protein products of of Rhizobium melliloti, nodP and nodO.";

Mol. Plant Microbe Interact. 2:181-194(1989).
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STRAIN-RCZ011 / SU47;
MEDLINE-89313304; PubMed-2546009;
MEDLINE-89313304; PubMed-2546009;
Medline Sharma S.B., Maillet
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Bacteria; Proteobacteria; alpha su Rhizobiaceae; Sinorhizobium.
NCBI_TaxID-382;
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    InterPro; IPR005225; Pfam; PF00009; GTP_E
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SIMILARITY: IN THE N-TERMINAL SECTION; BELONGS
ELONGATION FACTOR FAMILY. CYSN/NODO SUBFAMILY.
SIMILARITY: IN THE C-TERMINAL SECTION; BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATALYTIC ACTIVITY: ATP + sulfate = diphosphate CATALYTIC ACTIVITY: ATP + adenylylsulfate = ADP phosphoadenylylsulfate. SUBUNIT: SULFATE-ACTIVATING ENZYMES, NODP AND NO
                                                 IPR004161;
IPR000795;
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OU5225; Small
GTP_EFTU; 1
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P1359; Q90919; Q90918;
O1-JAN-1990 (Rel. 13, Cres
15-JUL-1998 (Rel. 36, Last
15-JUN-2002 (Rel. 41, Last
Neural cell adhesion molec
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Eukaryota; Metazoa; Chordata; (
Archosauria; Aves; Neognathae;
                                                                                                                                                                                                        Hemperly J.J., Edelman G.M., Cunningham B.A.; "CDNA clones of the neural cell adhesion molecule (N-membrane-spanning region consistent with evidence for attachment via a phosphatidylinositol intermediate."; proc. Natl. Acad. Sci. U.S.A. 83:9822-9826(1986).
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TIGREAMS; TIGRO0455; apsK; 1.
PROSITE: PS00301; EFACTOR_GTP; 1.
Plasmid; Nodulation; Transferase;
                 developmental sequence.";
J. Cell Biol. 103:1431-1439(1986)
                                                                            SEQUENCE OF 810-1069 FROM N.A. MEDLINE-87033934; PubMed-3771645; Murray B.A., Owens G.C., Prediger Cunningham B.A., Edelman G.M.; "Cell surface modulation of the ne
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  domains,
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                                                             resulting from alternative mRNA splicing
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APS_kinase;
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8 SULFATE ADENYLYL TRANSFERASE.
41 ADENYLYLSULFATE KINASE.
38 GTP (BY SIMILARITY).
14 GTP (BY SIMILARITY).
68 GTP (BY SIMILARITY).
74 ATP (POTENTIAL).
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1E1261F04ED33A93 CRC64;
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Pred. No.
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                                                                                     neural
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rnative RNA splicing.";
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MEDLINE-93122797; pubMede1478668;

Colwell G., Li B., Forrest D., Brackenbury

"Conserved regulatory elements in the promo gene.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-White leghorn;
Sasner M., Covault J.;
Submitted (AUG-1993) t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 1-17
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ALTERNATIVE PRODUCTS: 4 isoforms; A/N-CAM 180 (shown here),
CAM 140, C and D; are produced by alternative splicing.
SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERRAMILY.
SIMILARITY: CONTAINS 5 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
SIMILARITY: CONTAINS 2 FIBRONECTIN TYPE III-LIKE DOMAINS.
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horn; TISSUE=Erythrocyte;
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ROTEIN IS A CELL ADHESION
HESION, NEURITE FASCICULAT
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L ADHESION MOLECULE :
FASCICULATION, OUTGI
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RESULT 11
P152_YEAST
ID P152_YEAST
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DT 01-FEB-1995 (
DT 01-FEB-1995 (
DT 16-OCT-2001 (
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GN POM152 OR YMR
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Matches
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Pfam; PF00041; fn3; 2.
Pfam; PF00047; 19; 5.
SMART; SM00060; FN3; 2.
SMART; SM00410; IG_like; 1
SMART; SM0040B; IGC2; 4.
Cell adhesion; Glycoprotei
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InterPro;
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  Nuclear envelope
POM152 OR YMR129V
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IPR003598;
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                    pore
                                     31, Created)31, Last sequence update)40, Last annotation update)
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IG-LIKE C2-TYPE DOMAIN 1.

IG-LIKE C2-TYPE DOMAIN 2.

IG-LIKE C2-TYPE DOMAIN 3.

IG-LIKE C2-TYPE DOMAIN 3.

IG-LIKE C2-TYPE DOMAIN 4.

IG-LIKE C2-TYPE DOMAIN 4.

IG-LIKE C2-TYPE DOMAIN 4.

IG-LIKE C2-TYPE DOMAIN 5.

FIBRONECTIN TYPE-III 1.

FIBRONECTIN TYPE-III 1.

FIBRONECTIN TYPE-III 1.

HEPARIN-BINDING (POTENTIAL).

BY SIMILARITY.

BY 
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EXTRACELLULAR (POTENTIAL)
                                                                                                                                                                                                                                                                                                                           Score 26; I
Pred. No. 1
                    protein POM152 (P150)
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                                15-JUL-1999
15-JUL-1999
15-JUN-2002
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-I- FUNCTION: COMPONENT OF THE NUCLEAR PORE COMPLEX WHICH MAY THE NECESSARY ASYMMETRY REQUIRED FOR ANCHORING STRUCTURES CYTOPLASMIC FILAMENTS AND THE NUCLEAPLASMIC CAGE.

-I- SUBURIT: INTERACTS WITH NUPIT/O AND/OR NUPIBB.

-I- SUBCELLULAR LOCATION: TYPE II MEMBRANE PROTEIN. NUCLEAR PO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
Hypothetical protestR1764.
Synechocystis sp.
                                                                 YH64_SYNY3
P73042;
                                                                                       EXNY3
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                                                                                                                                                                                                                                                                                                                                                                                                                                         the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                        SEQUENCE
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European Bioinformatics Institute. There are no restrictions on its
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; Z48622; CAA88554.1;
A53824; A53824.
$0004736; POM152.
                                                                                                                                  662
                                                                                                                                               1 LYDAK 5
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5; Conserv
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TO S.POMBE SPBC29A10.07.
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PORE SIDE (POTENTIAL).
POTENTIAL.
CISTERNAL SIDE (POTENTIAL).
N-LINKED (GLCNAC. . .).
8 X 24 AA APPROXIMATE REPEATS.
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Hypothetical
SEQUENCE 17
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or send a
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Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D.,
Kerlavage A.R., Dougherty B.A., Tomb J.-F., Adams M.D., Reich C.I.,
Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A.,
Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D.,
Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C.,
Cotton M.D., Roberts K.M., Hurst M.A., Kalne B.P., Borodovsky M.
Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.;
"Complete genome sequence of the methanogenic archaeon, Methanococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-1998
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synechocystis sp. strain PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions 2 DNA Res. 3:109-136(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLIAMSY/UDIZOL, CONTROL MANDEL MAND
between the Swiss Institute of Bioinforms the Buropean Bioinformatics Institute. The by non-profit institutions as long modified and this statement is not as long
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Archaea; Euryarchaeota; Methanocaldococcaceae; N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methanococcus jannaschii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hypothetical
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01-NOV-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-JAL-1
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                                                                                                   SWISS-PROT entry
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(Rel. 36, Last sequence update)
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99; Pubmed-8688087;
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Pred. No.
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19BC13A3C710FEA7 CRC64;
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RESULT 14
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Best Local
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MEDLIND-21156231; PubMed=11258796;

Hayashi T., Makino K., Ohnishi M., Kurokawa K., Ishii K., Yokoye Hayashi T., Makino E., Nakayama K., Murata T., Tanaka M., Tobe 1 Lida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunag Kuhara S., Shiba T., Hattori M., Shinagawa H.;

"Complete genome sequence of enterohemorrhagic Escherichia coli oli7:H7 and genomic comparison with a laboratory strain K-12.";
                                                                                                                                                                                                                                                                                                                                                                                       Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D., Rose D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A., Posfai G., Hackett J., Kink S., Boutin A., Shao Y., Miller L., Grotbeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamousis K., Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C., Welch R.A., Blattner F.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
TIGR;
                                      or send an
                                                                                    the European Bioinformatics Institute.
                                                                                                              This
                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. STRAIN-0157:H7 / R
                                                                                                                                                                                                                                                                                                                                                      "Genome sequence of enterohaemorrhagic Escherichia Nature 409:529-533(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xanthine dehydrogenase, FAXDHB OR Z4206 OR ECS3740. Escherichia coli 0157:H7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-0157:H7 / EDL933 / ATCC 700927;
MEDLINE-21074935; PubMed-11206551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. STRAIN-0157:H7 / E
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entities requires a or send an email to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Escherichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacteria; Proteobacteria; gamma subdivision;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
Xanthine dehydrogenase, FAD binding subunit (EC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDHB_ECO57
                                                                                                         Source (purine caracular to the caracular transfer of xdhA, xdhB and xdhC (Probable).

SUBUNIT: Heterotimer of xdhA, xdhB and xdhC (Probable).
                                                                                                                                                                    Participates in limited purine salvage (requires aspartate) does not support aerobic growth on purines as the sole carb source (purine catabolism) (By similarity).

CATALYTIC ACTIVITY: Xanthine + NAD(+) + H(2)0 - urate + NAD(-)
                                                                                                                                                                                                                     FUNCTION: Presumed to be a dehydrogenase,
                                                                                 SWISS-PROT entry is copyright. It is produced through
een the Swiss Institute of Bioinformatics and the EN
European Bioinformatics Institute. There are no resti
   AE005516;
AP002563;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U67494; AAB98416.1;
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                                                           non-profit institutions as long and this statement is not removed.
                                                                                                                                                                                                                                   8:11-22(2001).
                                    equires a license agreement (S
email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           257 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
  AAG57996.
BAB37163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                license agreement (See http://www.isb-sib.ch/announce/
license@isb-sib.ch).
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Query Match
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Query Match
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01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Oxidoreductase; NAD; Flavoprotein; Purine salvage; Complete proteome. SEQUENCE 292 AA; 31556 MW; 74A
                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entre European Bioinformatics Institute. There are no restr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dehydrogenase in purine salvage."
J. Bacteriol. 182:5332-5341(2000)
-!- FUNCTION: Presumed to be a de
                                                    InterPro; IPR005107; CO_deh_flav_C.
InterPro; IPR002346; dehydrog_molyb
pfam; pF00941; FAD_binding_5; 1.
pfam; pF03450; CO_deh_flav_C; 1.
                                                                                                                                          EMBL; U28375; AAA83048.1; -. EMBL; AE000370; AAC75905.1:
                                                                                                                                                                                                   or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Riley M., Collado Vides J., Glasner J.D., Rode C.K., Ma Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=K12 / MG1655;
MEDLINE=97426617; PubMed=9278503;
                                                                                                                                                                                                                    entities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISCUSSION OF
STRAIN-K12 / V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Escherichia coli.
Bacteria; Proteobacteria; gamma subdivision;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Xanthine dehydrogenase, XDHB OR B2867.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Purine salvage; SEQUENCE 292
                                                                                                                             EcoGene; EG13050;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Xi H., Schneider B.L., Reitzer L.;
"Purine catabolism in Escherichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=20444178; PubMed=10986234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "The complete genome sequence Science 277:1453-1474(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mau B., Shao Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=562;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oxidoreductase; NAD; Flavoprotein; FAD;
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                                                                                                                                                                                                                                                                                                                       GOES INC. SUFFICE CATABOLISM).

SOUTCE (purine catabolism).

CATALYTIC ACTIVITY: Xanthine + NAD(+) +

COFACTOR: FAD (By similarity).

PATHWAY: Purine catabolism; first commit

SUBUNIT: Heterottimer of XdhA, XdhB and
                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: presumed to be a dehydrogenase, but Participates in limited purine salvage (requires)
                                                                                                                                                                                                                                                                                                                                                                                                                                    does not support aerobic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _ECOLI
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                                                                                                                                                                                                                  non-profit institutions as long
and this statement is not removed
requires a license agreement (See
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 74A07D137DA857E8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEC44F9990BF9BC1 CRC64;
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                                     Purine metabolism;
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Search completed: July 11, 2003, 11:55:18 Job time : 1.47817 secs	Oy 1 LYDAK 5 : Db 130 IYDAK 134	Best Local Similarity 80.0%; Pred. No. 1.3e+02; Matches 4; Conservative 1; Mismatches 0;
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Match
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      Q8u3h5 pyrococcus
Q8u3h5 pyrococcus
Q8u3h5 pyrococcus
Q8u4h8 caenorhabdi
Q9asil oryza sativ
Q8u960 unidentifie
Q9fcv9 listeria mo
Q8t3h1 caenorhabdi
Q926w7 listeria mo
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08suh3 encephalito
001760 caenorhabdi
066796 aquifex aeo
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0.0 299 17 QBTKSO Q97KSO Q97KS	Q94404 caenornabdı Q8zlz4 salmonella	Q94404 Q8ZLZ4	16	491	100.0	26	45
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100.0 299 17 QBTKSO		Q8XK23	16	370	100.0	26	29
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100.0 299 17 QBTKSO QBtksO 100.0 301 16 Q97GN2 Q97gn2 100.0 304 17 Q97V63 Q97v63 100.0 306 2 Q936E9 100.0 329 2 Q93PV9 Q93pv9 s		Q94M05	9	331	•	26	22
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                                                                                                                                                        Query Match
Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                    "Complete genome sequence of an aerobic thermoacidophilic Crenarchaeon, Sulfolobus tokodali strain7.";
DNA Res. 8:123-140(2001).
EMBL; AP000984; BAB66001.1;
Hypothetical protein; Complete proteome.
SEQUENCE 107 AA; 12386 MW; 2CF24E31B02D3C68 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-JCM 10545 / 7;

pubMed=11572479;

Kawarabayasi Y., Hino Y., Horikawa H., Jin-no K., Takahashi M.,

Kawarabayasi Y., Hino Y., Horikawa H., Jin-no K., Takahashi M.,

Sekine M., Baba S.-I., Ankai A., Kosugi H., Hosoyama A., Fukui S.,

Nagai Y., Nishijina K., Otsuka R., Nakazawa H., Takamiya M., Kato Y.,

Yoshizawa T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Oguchi A.,

Aoki K.-I., Masuda S., Yanagii M., Nishimura M., Yamagishi A.,

Oshima T., Kikuchi H.;
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
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                                                                                                                                                            Score 26; DB 17;
Pred. No. 1.3e+02;
; Mismatches 0;
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EMBL; AJ131519; CAB52483.1; -.
InterPro; IPR001387; HTH_3.
Pfam; PF01381; HTH_3.1; -.
SMART; SM00530; HTH_XXE; 1.
SEQUENCE 108 AA; 12086 MW;
                                                                                                                  01-JUN-2002 (TrEMBLre)
01-JUN-2002 (TrEMBLre)
01-JUN-2002 (TrEMBLre)
Hypothetical protein I
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Q9T1J3;
Q1-MAY-2000
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MEDLINE-95138034; PubMed=7836307;

Henrich B., Binishofer B., Blaesi U.;

"Primary structure and functional analysis o
Lactobacillus gasseri bacteriophage phi-adh.

J. Bacteriol. 177:723-732(1995).
                                      Encephalitozoon cuniculi.
Eukaryota; Microsporidia;
NCBI_TaxID=6035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fremaux C., De Antoni G., Raya R., Klaenhammer T.; "Genetic organization and sequence of the region encoding infunctions from Lactobacillus gasseri temperate bacteriophage
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  SEQUENCE
                                                                                                       ECU10_0230.
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Viruses; dsDNA viruses, no F
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01-DEC-2001 (TERMBLrel. 19, Last sequence update)
01-DEC-2001 (TERMBLrel. 19, Last annotation update)
Hypothetical 19.3 kDa protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. STRAIN=BRISTOL N2; MEDLINE=99069613;
                                                                                                                                                                                           Submitted (OCT-2001) to the EMBL; AF003130; AAB54128.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Caenorhabditis elegans.
Eukaryota; Metazoa; Nem
Rhabditidae; Peloderina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-21576510; PubMed-11719806; Katinka M.D., Duprat S., Cornillot E., M. Prensier G., Barbe V., Peyretaillade E., Delbac F., El Alaoui H., Peyret P., Saur Weissenbach J., Vivares C.P.;
                                                                                                                                                       SEQUENCE
                                                                                                                                                                         EMBL; AF0031:
Hypothetical
                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                            Pauley A., Gattung S
"The sequence of C.
Submitted (MAY-1997)
                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
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EMBL; AL590449; CAD25742.1; -.
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                                                                                                                                                                                                                                                       Waterston R.;
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SEQUENCE 1:
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58
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7) to the
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EMBL/GenBank/DDBJ
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01-MAR-2002
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  058353
                                                                                                                                                                                                                                                                                                                                                  STRAIN-VC1 / DSM 3638 / ATCC 43587 / JCM 8422; Weiss R.B., Dunn D.M., Robb F.T., Brown J.R.; Weiss R.B. genome. The complete sequence of the Pyrococcus furiosus genome. Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AE010771; AAL80615.1; -
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01-JUN-2002 (TrEMBLrel. 21, Last sequence up
01-JUN-2002 (TrEMBLrel. 21, Last annotation
Transcription initiation factor TFIIE.
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EMBL; AE000693; AAC06761.1; -.
EMBL; FR0002934; NTP_transf.
InterPro; IPR001201; PAP_25A_core.
Pfam; PF01309; NTP_transf.2; 1.
Hypothetical protein; Complete proteome.
Hypothetical protein; Complete proteome.
178 AA; 20421 MW; C3EF96B8B9A78F42 CRC64;
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Bacteria; Aquificae;
NCBI_TaxID-63363;
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195 AA; 22885 MW; F7507A
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l protein AQ_507.
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EMBL; APD00003; BAA29708.1; -
InterPro; IPR002853; TFIIE_alpha.
InterPro; IPR005241; TFIIE-alpha-rel.
Pfam; PF02002; TFIIE_alpha; 1.
SMART; SM00531; TFIIE; 1.
TIGRPAMS; TIGR00373; TIGR00373; 1.
Hypothetical protein; Complete proteome
SEQUENCE 197 AA; 23127 MW; 2A0AA711
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Science 20-
TMRL; Z68752; CALL
TMRL; 199 AA;
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MEDLINE=98344137; PubMed=9679194;

MEDLINE=98344137; PubMed=9679194;

Kawarabayasi Y., Sawada M., Horikawa H., Haikawa Y., Hino Y.,

Yamamoto S., Sekine M., Baba S.-I., Kosugi H., Hosoyama A., Nagai Y.

Sakai M., Ogura K., Otsuka R., Nakazawa H., Takamiya M., Ohfuku Y.,

Sakai M., Ogura K., Otsuka R., Nakazawa H., Takamiya M., Oguchi

Punahashi T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Oguchi

Aoki K.-I., Yoshizawa T., Nakamura Y., Robb F.T., Horikoshi K.,

Masuchi Y., Shizuya H., Kikuchi H.;

Masuchi Y., Shizuya H., Kikuchi H.;

"Complete sequence and gene organization of the genome of a hyper-
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Eukaryota; Metazoa; Nemat
Rhabditidae; Peloderinae;
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01-JAN-1998 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                    "Genome sequence of the nematode investigating biology."; Science 282:2012-2018(1998).
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DNA Res. 5:55-76(1998)
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9 AA; 23636 MW;
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE-96316404; PubMed-8702280;
Chen F., Suttle C.A., Short S.M.;
Chen F., Suttle C.A., Short S.M.;
"Genetic diversity in marine algal virus communities as sequence analysis of DNA polymerase genes.";
Sequence analysis of DNA polymerase genes.";
Appl. Environ. Microbiol. 62:2869-2874(1996).
Appl. Environ ACTIVITY: N DEOXYNUCLEOSIDE TRIPHOSPHATE.
                                                                                                                                                                                                                                                                                                                                                                                          Clone:P0482C06.";
Submitted (AUG-2000) to the EMBL/GenBank/LLLL
EMBL; AP002882; BaB39866.1; -.
EMBL; AP002845; BAB398632.1; -.
EMBL; AP002845; BAB78632.1; -.
InterPro; IPR000169; SHPROTEASE_HIS; UNKNOWN_1.
PROSITE; PS00639; THIOL_PROTEASE_HIS; UNKNOWN_1.
22915 MW; 9EAAAF8D9184AAA3 CRC64;
                                                                                                                                                                                                               Q88960;
Q88960;
01-NOV-1996
01-NOV-1996
01-MAR-2002
          Pfam;
                                                                                                                                                                             DNA polymerase (Fragment). Unidentified phycodnavirus Viruses; dsDNA viruses, no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
p0439B06.1 protein (P0482C06.29 protein).
p0439B06.1 OR p0482C06.29
Oryza sativa (Rice).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta
   PRINTS;
                                                                                                                                                         Environmental samples.
NCBI_TaxID=43245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sasaki T., Matsumoto T., Yamar "Oryza sativa nipponbare(GA3) clone:P0482C06.";
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Ehrhartoideae; Oryzeae; Oryza
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          InterPro; IPR002064; DNA_pol_B.
Fam; PF00136; DNA_pol_B; 2.
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SIMILARITY: BELONGS TO DNA
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/ta; Liliopsida; Poales; Poaceae;
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01-JUN-2002 (TrEMBLrel. 21, Cr
01-JUN-2002 (TrEMBLrel. 21, La
01-JUN-2002 (TrEMBLrel. 21, La
Hypothetical 27.7 kDa protein.
                                                                                                                                                                                                                                                                                                                      "The L. monocytogenes parab locus.";
Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ010494; CAC06097.1;
InterPro; IPR000707; ATPase_Para.
InterPro; IPR000392; NitrogenaseII.
Pfam; PF00991; Para; 1.
Pfam; PF000991; NITROGNASEII.
        "Genome sequence of the nema
investigating biology. The C
Science 282:2012-2018(1998).
                                                     SEQUENCE FROM N.A. STRAIN=BRISTOL N2; MEDLINE=99069613;
                                                                                                    Caenorhabditis elegans.
Eukaryota; Metazoa; Nemat
Rhabditidae; Peloderinae;
SEQUENCE FROM N.A.
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01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA replication; DNA-binding; DNA-directed DNA polymerase.
NON_TER 1 1
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01-MAR-2001
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                                               Waterston
                                                                                           NCBI_TaxID=6239;
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Bacteria; Firmicutes; B
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230 AA;
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                                                       PubMed=9851916;
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                          ode C. elegans: a platform elegans Sequencing Consort
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Submitted (APR-2002) to the Elembl; AF003130; AAM15579.1; -
Hypothetical protein.
SEQUENCE 250 AA; 27678 MW;
                                                                                                                                                                                                                                                                                                                                                                                                       Glaser P., Frangeul L., Buchrieser C., Rusniok C., Amend A.,
Baquero F., Berche P., Bloecker H., Brandt P., Chakraborty T.,
Charbit A., Chetouani F., Couve E., de Daruvar A., Dehoux P.,
Domann E., Dominguez-Bernal G., Duchaud E., Durant L., Dussurget O.,
Entian K.-D., Fsihi H., Garcia-del Portillo F., Garrido P.,
Gautier L., Goebel W., Gomez-Dopez N., Hain T., Hauf J., Jackson D.,
Jones L.-M., Kaerst U., Kreft J., Kuhn M., Kunst F., Kurabkat G.,
Madueno E., Maitournam A., Mata Vicente J., Ng E., Nedjari H.,
Nordsiek G., Novella S., de Pablos B., Perez-Diaz J.-C., Purcell R.,
Vazquez-Boland J.-A., Voss H., Wehland J., Cossart P.;
"Comparative genomics of Listeria species.";
                                                                                                                                                                                                                                                                                                                                 Science 294:849-852(2001).
EMBL; AL591984; CAD01004.1; -.
EMBL; AL596174; CAC98148.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPECIES-L.monocytogenes, and L.innocua;
STRAIN-EGD-E / SEROVAR 1/2A, AND CLIP 1
MEDLINE-21137279; PubMed-1167969;
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01-DEC-2001 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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"The sequence of C. elegans
Submitted (MAY-1997) to the
                                                                                                                                                                                         SEQUENCE 253 AA
                                                                                                                                                                                                                                                             ListiList; LINO2923; -. ListiList; LMO02791; -. InterPro; IPR000707; AT
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231 LYDAK 235
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BLrel. 21, Last :
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RESULT 14

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Parkhill J., Wren B.W., Mungall K., Ketley J.M., Churcher C.,
Basham D., Chillingworth T., Davies R.M., Feltwell T., Holroyd S.,
Jagels K., Karlyshev A.V., Moule S., Pallen M.J., Penn C.W.,
Quail M.A., Rajandream M.A., Rutherford K.M., van Vliet A.H.M.,
Whitehead S., Barrell B.G.;
"The genome sequence of the food-borne pathogen Campylobacter jejuni
reveals hypervariable sequences.";
Nature 403:665-668(2000).
EMBL, AL139074; CAB72595.1; -
                                                                                                                                                                                                                                                            01-OCT-2000 (TrEMBLrel. 15, 01-OCT-2000 (TrEMBLrel. 15, 01-MAR-2002 (TrEMBLrel. 20, Putative methyltransferase. SPBC21C3.07C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN=NCTC 11168; MEDLINE=20150912;
                                                                                                                                   Seeger K., Harris D., Lyne M
Submitted (FEB-2000) to the
EMBL; AL157918; CAB76043.1;
                                                                                                                                                                                                                           Schizosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetees;
Schizosaccharomycetales; Schizosaccharomycetaceae;
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SEQUENCE 281 AA;
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InterPro; IPR000051; SAM_bind.
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Gapop 10.0 , Gapext 0.5
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
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ALIGNMENTS

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Tsujimoto M,
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M, Tsuruoka N, Yamag
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93JP-0067339.
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Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.

Human megakaryocyte differentiation factor peptide

16-AUG-1994 (first entry)

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RESULT 2
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The invention relates to full length GENSET human nucleic acids encoding potentially secreted proteins. The nucleic acids and the polypeptides they encode may be used in the prevention, treatment and diagnosis of diseases associated with inappropriate GENSET gene expression. For example, they be used to treat disorders associated with decreased GENSET gene expression by rectifying mutations or deletions in a patient's genome that affect the activity of GENSET or by supplementing the patients own production of GENSET polypeptides. Conversely,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human MDF (see AAR48379) can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietin making it useful for treatment of diseases involving a decrease
                                                                                                                      Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55-57kD by SDS-PAGE, exhibits an isoelectric point of 6.0-7.0 and contains an amino acid sequence comprising at least one of the sequences AAR57107-R57115.
                                                                                                                                                          Full length GENSET human proteins, useful in gene
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06-MAR-2000; 2000US-0187470
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                                                                                                                   Page 903; 921pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₹,
                                                                                                                                             for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
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                                                                                                                                                                                                                                       Bougueleret
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .08;
                                                                                                                                            nucleic acids encoding property and vaccination sis of those diseases -
                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene therapy; vaccine; treatment; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .08;
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hes 0;
                                                                                                                                                                                                                                         Jobert
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                                                                                                                                                        potentially secreted a gainst a variety of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
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RESULT 3
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Best Local
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                     Human MDF can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietin making it useful for treatment of diseases involving a decrease in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55-57kD by SDS-PAGE and exhibits an isoelectric point of 6.0-7.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        their expression. The sense and antisense nucleic acids may also used as DNA probes in diagnostic assays to detect and quantitate presence of similar nucleic acid sequences in samples, and hence determine which patients may be in need of restorative therapy. The GENSET polypeptides may be used as antigens in the production antibodies and in assays to identify modulators (agonists and antibodies and in assays to identify modulators (agonists and
                                                                                                                                                                                                                                                                                              (SUNR )
(TSUJ/)
                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                    17-JUL-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense nucleic acid molecules may be administered to down regulate GENSET expression by binding with the cells' own genes and preventing
                                                                                                                                                                  decrease
                                                                                                                                                                             New megakaryocyte differentiation factor - isolated from human epidermoid carcinoma cells, used to treat conditions involving
                                                                                                                                                                                                                     N-PSDB; AAQ56670
                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                        Tsujimoto
                                                                                                                                                                                                                                                                      Ishida
                                                                                                                                                                                                                                                                                                                                                                           19-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                    23-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                            EP583884-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human megakaryocyte differenaematopoietic stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-AUG-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antagonists) of GENSET
                                                                                                                                                                                                                                1994-058782/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159 NYEMK 163
                                                                                                                                         7; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                megakaryocyte
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TSUJIMOTO M.
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5; Conser
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                                                                                                                                                                 platelets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transplantation;
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                                                                                                                                       30-32; 47pp;
                                                                                                                                                                                                                                                           Tsuruoka
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93JP-0067339
                                                                                                                                                                                                                                                                                                                                                                           93EP-0305654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ulating factor; thrombocytopaenia; cancer chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                differentiation
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                                                                                                                                       English.
                                                                                                                                                                                                                                                        Yamaguchi
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Pred. No.
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chi N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     factor; MDF; thrombopoietin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                factor
                                                                                                                                                                                                                                                           K, Nakazato
Yamaichi K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22;
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RESULT 4
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AAB24142
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Best Local Similarity
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Best Local S
                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
Megsin; mesanglum-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim
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N-PSDB; AAX56712.
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                                                      Human megsin protein sequence SEQ ID NO:2.
                                                                                          30-JAN-2001
                                                                                                                              AAB24142;
                                                                                                                                                              AAB24142 standard; Protein; 380 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Megsin protein expressed specifically in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Megsin; mesangial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY08254;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human; rat; murine.
                                                                                                                                                                                                                                                          284 NYEMK 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Page 62-64; 100pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           284 NYEMK 288
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5; Conserv
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                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                treatment; diagnosis; disease; IgA nephropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .08;
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Pred. No. 1.6
0; Mismatches
                                                                                                                                                                                                                                                                                                                            Score 28; DE
Pred. No. 1.6
); Mismatches
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thes 0;
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1.6e+02;
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                                                                                                                                                                                                                                                                                                                                                              Length 380;
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ID AAB8
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Best Local S
Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsin protein, which is given in the exemplification of the present invention.
                  06-OCT-1999;
                                                    06-OCT-2000; 2000WO-JP06988
                                                                                        12-APR-2001
                                                                                                                          WO200124628-A1
                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                 transgenic
                                                                                                                                                                                                                Human;
                                                                                                                                                                                                                                                    Human megsin protein
                                                                                                                                                                                                                                                                                          10-JUL-2001
                                                                                                                                                                                                                                                                                                                              AAB83075;
                                                                                                                                                                                                                                                                                                                                                                AAB83075 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 66-69; 93pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND LTD.
(MIYA/) MIYATA T.
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28-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis; biological sample; blood; urine
                                                                                                                                                                                                                                                                                                                                                                                                                                                        284 NYEMK 288
                                                                                                                                                                                              megsin; mesangial cell
enic mouse; glomerular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 NYEMK 5
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5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         renal function comprises assaying megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sample
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                                                                                                                                                                                                                                                                                        (first entry)
                  99JP-0285736
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99JP-0306623
                                                                                                                                                                                                                                                                                                                                                                 Protein;
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                                                                                                                                                                                                 disease;
                                                                                                                                                                                                proliferative nephritis; nephrotropic;
disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 28;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 380;
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RESULT 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is human megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is usefu for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                     06-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-300136/31.
N-PSDB; AAF82438.
                                                                                                                                                                                                                                            25-FEB-2000;
                                                                                                                                                                                                                                                                                                                         Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                             Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter;
                                                                                                                                                                                                                                                                                                                                                                                                    Arabidopsis thaliana protein fragment SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                17-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Miyata
                                                                                                                                                                                                                                                                                                                                                  termination
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             se model for mesangial cell proliferative nephritis for development screening of new treatments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     method.
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99US-0128734

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This invention describes novel Staphylococcus-specific oligonucleotides based on the consensus femA nucleotide sequence which are used to develop products for the identification, detection and therapy of infections. The oligonucleotides can be used for the genetic amplification, the identification and/or quantification of various femA
                                                                                                                                                                                                                                                                     Gala
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Staphylococcus
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                                                                                                                         Claim 16; Fig 6a-b; 48pp; English.
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DB; AAX37798.
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UNIV CATHOLIQUE LOUVAIN.
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. 1.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequences which are specific to known or unknown Staphylococci species. Since the femA sequence is similar to the femB sequence, the oligonucleotides can also be used for the molecular genotyping of femB genes of different Staphylococci species or other gram-positive bacteria. The femA nucleic acids can also be used in therapeutic applications. They can also be used to identify inhibitors, e.g. antibodies or antisense oligonucleotides, for blocking expression of the femA nucleotide sequences. They can also be used for producing vaccines against Staphylococci infections.
                                                                                                                                                                                                                                                                                                                                                                               Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter;
                                                                                                                                                                                                                                                                                               25-FEB-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 68-74; 82pp; Japanese.
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3.7e+02;
thes 0;
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                                                                                                                                                                                                                                                                                                         AAB61548;
                                                                                  Unidentified
                                                                                                                                                                                                                                                    03-APR-2001
                                                                                                                                                                                                                                                                                                                                                                   AAB61548 standard;
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WO200100814-A2

Hetero-associating

Peptide WINZIPA1 used to identify hetero-associating peptides.

coiled-coil peptide; heterodimerisation

(first entry)

Peptide;

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Matches
                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                         This invention describes a novel nucleic acid molecule (I) encoding an alternan sucrase (E.C. 2.4.1.140 - an enzyme, that belongs to the glucosyltransferase group) The recombinant, purified alternan sucrase gene is useful for the fermentative production of alternan (a carbohydrate) and/or fructose by secreting the enzyme into a saccharose-containing culture medium. Alternatively, the enzyme is contacted with a saccharose-containing solution. The alternan and/or fructose is then isolated from the medium. Cosmetic products or foodstuffs containing alternan can be produced. Recombinant production alternan sucrase is advantageous as it provides a cost effective means recombined fructors for the fermine can be produced.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (PLAN-)
                                                                                                                                                                                                                          producing fructose for high fructose containing syrups, production of which previously has been achieved by costly production from maize starch. This sequence represents the Leuconostoc mesenteroides alternan sucrase protein which is described in the method of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     alternan sucrase protein
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                                          1 NYEMK 5
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MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
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                                                                                   Conservative
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                                                                                                          100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g recombinant Leuconostoc mes
and methods of alternan and
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                                                                                   Score 28; DB 21;
Pred. No. 9.6e+02;
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RESULT 14
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                                                                Identifying heteroassociating (poly)peptides involves designing an appropriate coiled-coil library and screening by using a library v
                                                                                                                                               WPI;
                                                                                                                                                                                           Plueckthun
                                                                                                                                                                                                                                                                                                                                      26-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hetero-associating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide WINZIPA3 used to identify hetero-associating peptides
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80.0%;
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a second
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Claim

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Page 40;

56pp;

English

Matches Best Local Query Match

Similarity 4; Conserv

Conservative

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Pred. No. 55; l; Mismatches

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Matches 4
                                             The present invention relates to a method for identifying hetero-associating coiled-coil peptides. The method comprises providing library of peptides with the general formula of AAB61946, and a second library of peptides with the general formula of AAB61947. Hetero-association of peptides from the two libraries can then be screened for via a screenable or selectable property caused by the hetero-association of the two peptides. The identified peptides can be used for heterodimerisation of fusion proteins. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for identifying hetero-associating coiled-coil peptides. The method comprises providing library of peptides with the general formula of AAB61346, and a second library of peptides with the general formula of AAB61547.

Hetero-association of peptides from the two libraries can then be screened for via a screenable or selectable property caused by the hetero-association of the two peptides. The identified peptides can be used for heterodimerisation of fusion proteins. The present sequence is hetero-associating peptide that can be used in method of the present
                                                                                                                                                                                                     Identifying appropriate
                                                                                                                                                                 Claim 5;
                                                                                                                                                                                                                                            WPI; 2001-137954/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-APR-2001
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                                  hetero-associating
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Search completed: July 11, 2003, 11:54:25 Job time : 3.86902 secs

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Result
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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length: 2000000000
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1: /cgn2_6/ptodata/1,
2: /cgn2_6/ptodata/1,
3: /cgn2_6/ptodata/1
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Copyright (c) 1993 - 2003 Compugen Ltd
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US-08-472-659-34
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US-08-611-977-34
US-08-355-888A-22
US-08-365-329A-89
US-08-936-32-89
US-08-938-44.3-4
US-08-939-727-89
US-08-939-727-8
US-08-939-727-8
US-08-939-727-7
US-08-442-281-7
US-08-421-822-3
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	172659	S/084	tion U	-8 Application US/08472659	, 0	T 1 3-472-65 quence 8
	ALIGNMENTS					
Sequence 3, Appli	US-08-790-519-3		225	89.3	25	5
•	US-08-677-010-3	2	2254	9	25	14
w `	PCT-US95-11808-3		1090	89.3	25	ü
	US-08-726-214-4		109	9.	25	2
ω,	US-08-307-896-3		109	9.	25	ij
Sequence 3, Appli	US-08-916-481-3		56	9.	25	ō
'n	US-08-916-481-2		55	9.	25	99
Sequence 4, Appli	US-09-321-276-4		55	9.	25	8
Ņ	US-08-416-870C-2		48	9.	25	37
Sequence 4, Appli	PCT-US95-11808-4		42	9	25	8
4	US-08-307-896-4		42	9.	25	35
523	US-09-134-001C-5230		422	9	25	4
Sequence 2, Appli	US-08-330-154-2		41	9.	25	ü
ۍ ۲	US-08-939-727-5		41	9.	25	32
<u>ა</u>	US-08-442-281-5		41	9.	25	ĭ
-	US-08-442-282-5		41	9.	25	ŏ
Sequence 5, Appli	US-07-757-390-5		41	9	25	29
Sequence 6, Appli	US-08-939-727-6		39	9.	. 25	8

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Sequence 8, APPLIANCE Patent No. 5831030 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                            COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,659
FILING DATE: 07-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                   TELEFAX: (703) 836-20 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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APPLICANT:
                                                                           REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                            APPLICATION NUMBER: US 0 FILING DATE: 14-JUL-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Burns, Do
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: YAMAGUCHI, NO. 5831030cmi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                   NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                              APPLICATION NUMBER: JP 5 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: P.O. Box
CITY: Alexandria
STATE: Virginia
                                                       TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RY: United States 22313-1404
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YAMAICHI, Kozo
YAMAGUCHI, No. 5831030omi
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ISHIDA, No. 5831030uhiro
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NAKAZATO, Hiroshi
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                                                            (703)
               3) 6-2021
836-2021
NO: 8:
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                                                                                                    001560-248
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Best Local Similarity 100.0%; Matches 5; Conservative (

0;

Pred. No. 1.9e+05; Mismatches 0;

Indels

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Gaps

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; LENGTH: 5 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-472-659-8
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Query Match
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                                                                                                                                            TELEFAX: (703) 836-66.
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 30,427
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEPAY: 773
                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/474,661
FILING DATE: 07-JUN-1995
                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. 5874253omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US US/VJ.,
FILING DATE: 14-JUL-1993
FILING DATE: 14-JUL-1993
FILING DATE: 14-JUL-19305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                               TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: JP 4-
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Alexandria
STATE: Virginia
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o. 5874253
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                                                                                                                 5 amino acids
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NAKAZATO, Hiroshi
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100.0%; Pred. No.
tive 0; Mismatch
 100.0%;
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Score
28;
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DB 2;
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Length
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; MOLECULE TYPE:
US-08-611-977-8
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                                                          Query Match
Best Local S
Matches 5
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                                                                                                                                                                                                                                   TELEFAX: (703) 836-20: INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATA:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNABER: US 08/091,028
APPLICATION UNABER: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. 59728860m1
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 5 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
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                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                              NAME: McGowan, Malcolm REGISTRATION NUMBER: 39 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.30
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1 NYEMK 5
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                                                                                                                                                  uss: single
linear
                                                            Conservative
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NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                                 (703)
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                                                                         100.0%;
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                                                                       Score 28; DB 2;
Pred. No. 1.9e+05;
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Best Local Similarity
Thes 5; Conserve
                                                                           RESULT 5
US-08-474-661-34
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                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
                         Sequence 34, Applicat
Patent No. 5874253
GENERAL INFORMATION:
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APPLICANT:
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PRIOR APPLICATION UNMEER: JP 5-067339
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
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PRIOR APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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REFERENCE/DOCKET NUMBER: 001560-248
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION: NAME: MCGOWAN, Malcolm K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/472,659 FILING DATE: 07-JUN-1995
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STATE: Virginia
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                                                                                                                                      284 NYEMK 288
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5. 5831030
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22313-1404
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                                                           Application US/08474661
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P.O. Box 1404
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YAMAICHI, KOZO
YAMAGUCHI, NO. 5831030cmi
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TSUROUOKA, No. 5831030uo
NAKAZATO, Hiroshi
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TSUJIMOTO, Mas
IWASA, Fuyuki
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Pred. No.
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
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                APPLICANT:
APPLICANT:
TITLE OF IN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
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REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/474,661
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CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy disk
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   NUMBER
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CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                Local Similarity
nes 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
TOPOLOGY: linear
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OPERATING SYSTEM: PC-DOS/MS-DOS
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5972886
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INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR SEQUENCES: 34
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George Mason Bldg., Washington & I
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YAMAICHI, KOZO
YAMAICHI, NO. 58742530mi
                            KURIHARA, Tatsuya
YAMAICHI, Kozo
YAMAGUCHI, No. 5972886omi
                                                                                         MIURA, Kenju
                                                                                                         TSUROUOKA, No. 5972886uo
NAKAZATO, Hiroshi
                                                                                                                                        IWASA, Fuyuk
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NAKAZATO, Hiroshi
                                                                             ISHIDA, No.
                                                                                                                                                           TSUJIMOTO, Masafumi
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                                                                             5972886uhiro
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ER: 001560-204
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Pred. No.
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CORRESPONDENCE ADDRESS:

ADDRESSEE:

CITY: Alexandria

P.O.

Burns, Doane, Swecker & Mathis D. Box 1404

Virginia

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Best Local Similarity
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COUNTY: 10036-2/11
ZIP: 10036-2/11
COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Ploppy disk
MEDIUM TYPE:
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APPLICANT:
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER: US 08/091,028
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 380 amino acids
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ZIP: 22313-1404
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VENTION: Hu-B1.219, A NOVEL HEMATOPOIETIN
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       Release #1.0, Version #1.30
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Pred. No.
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Matches 4
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                                                                                              NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                        CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Poissant, Brian M.
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                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
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   MOLECULE TYPE:
                                                                                SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                STRANDEDNESS
                                                                                                                                                                          NAME: Poissant, Brian M. REGISTRATION NUMBER: 28,462 REFERENCE/DOCKET NUMBER: 72
                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 14-DEC
                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 10036-2711
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                                                                                                                           TELEFAX:
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TELEFAX: (212) 869-9741/8864
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                                                              LENGTH:
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1155 Avenue of the Americas
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VENTION: HU-B1.219, A NOVEL HUMAN HEMATOPOIETIN
VENTION: RECEPTOR
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Pred. No. 3
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RESULT 10
US-08-693-696-22
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US-08-693-697-22
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Patent No. 5
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                                   GENERAL INFORMATION:
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TELEFAX: 650-493-5556
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
            APPLICANT:
                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 28,462
REFERENCE/DOCKET NUMBER: 891
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-4935
                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/693,
FILING DATE: 05-AUG-1996
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NAME: Poissant, Brian M.
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Snodgrass, H. R.
Cloffi, Joseph
Zupancic, Thomas J.
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US-08-946-329A-89
; Sequence 89, Application US/08946329A
; Patent No. 6057091
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Best Local Similarity
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                                                                                          ZIP: 92037

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                   ....ER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: Faster:
URRENT ...
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APPLICATION NUMBER: US 08
FILING DATE: 14-DEC-1994
ATTORNEY/AGENT INFORMATION:
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SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                 CURRENT APPLICATION DATA:
                                                                                                                                                      STREET: LA JOLIA
CITY: LA JOLIA
CTATE: CA
TSA
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TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION: Hu-B1.219,
TITLE OF INVENTION: RECEPTOR
                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 1
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APPLICANT: Porter, Jeffrey A
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ZIP: 92037
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TELEFAX: 66141 PENNIE
TELEX: 66141 PENNIE
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                                                                                                                                                                                                    ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
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APPLICATION NUMBER: US/08/946,329A FILING DATE: 07-OCT-1997
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1155 Avenue of the Americas
                                                                                                                                                    USA
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                                              FastSEQ for Windows Version 2.0b
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                                                                   Windows 95
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 235 amino acid
                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650.855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 619/678-5099 INFORMATION FOR SEQ ID NO:
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LENGTH: 99 amino acids
                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                             CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSE0 for Windows Version 2.0
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FITLE OF INVENTION: HUMAN N-ACETYL TRANSFERASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                           APPLICATION NUMBER:
FILING DATE: HEREWI
                                                                                                                                                                                  FILING DATE:
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REFERENCE/DOCKET NUMBER: 07265/140001
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                                                                 650-845-4166
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hillman, Jennifer L.
Tang, Y. Tom
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02-DEC-1994
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                                                                                                                PF-0361 US
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Best Local Similarity 80.0
Matches 4; Conservative
                            Matches
                                       Query Match
Best Local 9
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                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                               NAME: Billings, Lucy J
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                  IMMEDIATE SOURCE:
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APPLICATION NUMBER: US/08/928,443
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
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LIBRARY: GenBa
CLONE: 517485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Corley, Neil C.
TITLE OF INVENTION: HUMAN
NUMBER OF SEQUENCES: 5
                                                                               MEDIAL GENERALS STARS
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                                                                                                                                 STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                         TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM CON
OPERATING SYSTEM:
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STRANDEDNESS: si
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1 NYEMK 5
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                                       Similarity
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                                                                                                                                                                     235 amino acids
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                          Conservative
                                                                                                      GenBank
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80.0%;
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                                       Score 25;
Pred. No.
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Pred. No.
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                          Mismatches
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RESULT 14 US-07-757-390-8

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US-08-442-282-8
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TOPOLOGY: linear
MOLECULE TYPE: peptide
US-07-757-390-8
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Patent No.
GENERAL IN
                                                                                                            GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Takatsu, Kiyoshi
APPLICANT: Tominaga, Akira
APPLICANT: Takagi, Satoshi
APPLICANT: Murata, Yoshiyuki
APPLICANT: Murata, Yoshiyuki
TITLE OF INVENTION: Human And Murine Interleukin-5 Receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 89.3
Best Local Similarity 80.0
Matches 4; Conservative
                                                                                                                                                                                                                                                                 Sequence 8, Application US/08442282 Patent No. 5760204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 212 790-9090
TELEFAX: 212 8698864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
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ZIP: 10036-2711

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

OURRENT APPLICATION DATA:
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NAME: M1STOCK, S. Leslie
REGISTRATION NUMBER: 18,8
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
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APPLICANT: Takagi, Satoshi
APPLICANT: Murata, Yoshiyuki
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US
FILING DATE: 19910910
                                 STATE: New York COUNTRY: U.S.A.
                                                                    CITY: New York
                                                                                    STREET:
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                                                                                    1155 Avenue of the Americas
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                                                                                                       Pennie & Edmonds
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Pred. No.
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Search completed: July 11, 2003, 12:02:11 Job time: 1.89397 secs
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                                                                                                                                                                                                                 ; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-442-282-8
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 315 amino acids
TYPE: amino acids
TYPE: amino acid
                                                                                                                                             Matches
                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/757
FILING DATE: 10-SEP-1991
ATTORNEY/AGENT INFORMATION:
NAME: Misrock, S. Leslie
                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 700
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212 790-9090
TELEPHONE: 212 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Misrock, S. Leslie REGISTRATION NUMBER: 18,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                     251 NYELK 255
                                                                                                         1 NYEMK 5
                                                                                                                                           4.
                                                                                                                                                                Similarity
                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                     unknown
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                                                                                                                                                              Score 25; DB 1;
Pred. No. 1.3e+02;
                                                                                                                                             Mismatches
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/cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
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0 US-09-731-872-445
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0 US-10-029-180-64
US-09-995-749A-12
US-10-177-293-498
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US-09-853-386-69
US-09-878-672-2
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                                           Sequence 34, Appl
Sequence 64, Appl
Sequence 12, Appl
Sequence 19, Appl
Sequence 49, Appl
Sequence 69, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 3, Appl
Sequence 3, Appl
Sequence 63, Appl
Sequence 63, Appl
Sequence 64, Appl
Sequence 65, Appl
Sequence 65, Appl
Sequence 66, Appl
Sequence 67, Appl
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74,	72, F	Sequence 124, App		Sequence 146, App	Sequence 70, Appl	, 68	14, App	Sequence 1862, Ap	e 1325	Sequence 3348, Ap	Sequence 237, App	Sequence 15015, A	339	e 67,	37,	37,	37,	37,	Sequence 37, Appl	Sequence 5, Appli	Sequence 520, App	Sequence 206, App		Sequence 12700, A	Sequence 5669, Ap

ALIGNMENTS

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US-10-091-442-8
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Patent No. US20020164711A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. US20020164711A1omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSE: Burns, Doane, Swecker & Mathis
STREET: P.O. Box 1404
CITY: Alexandria
                                                                                                                                                                                                                                   CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: TSUJIMOTO, Masafum
APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993 APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992 APPLICATION NUMBER: JP 6-067339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: Virginia
COUNTRY: United States
                                                                                                                               APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002
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ISHIDA, No. US20020164711Aluhiro
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TSUROUOKA, No. US20020164711A1uo
NAKAZATO, Hiroshi
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION: NAME: McGowan, Malcolm F
                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
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                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 08-AUG CLASSIFICATION:
                                                                           APPLICATION NUMBER: JP 4 FILING DATE: 17-JUL-1992
                                                                            FILING DATE:
                                                                                                                         APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
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TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: McGowan, Malcol REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                   Virginia
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ISHIDA, No. US20010026931Aluhiro
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YAMAGUCHI, NO. US20010026931A1omi
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NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KURIHARA, Tatsuya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IWASA, Fuyuki
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Burns,
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                                                                                           JP 4-212305
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                                             JP 6-067339
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Pred. No.
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4e+05;
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Best Local Similarity
"hehes 5; Conserv
                                                                                                                                                                                                                                    US-10-091-442-34
                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Homo sapiens US-09-731-872-445
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                                                                                                                                                                                    Sequence 34, Application US/10091442 Patent No. US20020164711A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patent.pm
SEQ ID NO 445
LENGTH: 163
                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
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Patent No. US20020102604A1
                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1999-12-08
PRIOR APPLICATION NUMBER: US 60/187,470
PRIOR FILING DATE: 2000-03-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/731,872
CURRENT FILING DATE: 2000-12-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Jobert, Severin
TITLE OF INVENTION: FULL-LENGTH HUMAN CONAS ENCODING POTENTIALLY SECRETED PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/169,629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 78.US3.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Dumas Milne Edwards, Jean Baptiste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
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            KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. US20020164711A1omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE
                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                  159 NYEMK 163
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5; Conserve
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                                                                                                                                                                     TSUJIMOTO, Masafumi
                                                                                         ISHIDA, No. US20020164711Aluhiro
                                                                                                      MIURA, Kenju
                                                                                                                         TSUROUOKA, No. US20020164711Aluo
NAKAZATO, Hiroshi
                                                                                                                                                     IWASA, Fuyuki
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ADDRESS:
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Pred. No. 4e+05;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                         equence 34, Applatent No. US2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                  APPLICANT: YAMAICHI, KOZO APPLICANT: YAMAGUCHI, NO. US20010026931A10mi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
RELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
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LENGTH: 380 amino acids
TYPE: amino acid
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 34:
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FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
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                                       Alexandria
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                                                                                                                                                                                                                                                                                                                                                                              Application US/09140719
                                                      P.O. Box 1404
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                                                                                                                                                                                                                                                          TSUROUOKA, No. US20010026931Aluo NAKAZATO, Hiroshi
United States
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                                                                                                                                                                                                                  No. US20010026931A1uhiro
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                                                                                                                                                                                           Tatsuya
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                                                                                 PRIOR APPLICATION NUMBER: US 60/257,431
PRIOR FILING DATE: 2000-12-22
NUMBER OF SEQ ID NOS: 138
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                  TITLE OF INVENTION: NO. US20020182708A1el Regulators of Fungal Gene Expression FILE REFERENCE: MIC-004 CURRENT APPLICATION NUMBER: US/10/029,180 CURRENT FILING DATE: 2001-12-22
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 64, Application US/10029180
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INFORMATION FOR SEQ
                            LENGTH: 399
TYPE: PRT
ORGAN_SM: Artificial Sequence
                                                                                                                                                                                                                                           APPLICANT:
FEATURE: OTHER INFORMATION: fungal gene
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPUTER: OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 00 TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
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Milna, G. Todd
Sherman, Amir
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                                                                                                                                                                                                                                    Silva, Jeffry C.
Trueheart, Josh
Zhang, Lixin
                                                                                                                                                                                                                                                                                                                                          Holtzman, Doug
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Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10;
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US-10-029-180-64

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Leuconostoc mesenteroides US-09-995-749A-12
                                                                                                                                                                                                                                                                                                                                                                              US-10-177-293-498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                Sequence 498,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/995,749A
CURRENT FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: 09/604,957
PRIOR FILING DATE: 2000-06-28
PRIOR APPLICATION NUMBER: EPO 00201871.1
PRIOR FILING DATE: 2000-05-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                     APPLICANT: Lillie, James APPLICANT: Glatt, Karen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NOVEL GLUCOSYLTRANSFERASES FILE REFERENCE: BO43388-CIP
                            FILE REFERENCE: MRI-038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: VAN GEEL-SCHUTTEN, GERRITDINA HENDRIKA
                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                   ublication No.
                                                                     PPLICANT:
                                                                                                PPLICANT:
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                                                                                                                                                           PPLICANT:
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                                     ITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF BREAST CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 584
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                                                                                                                                                                                                                                                                                                                                                                                                                                       413 NYEMK 417
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          APPLICATION NUMBER: US/10/177,293
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5; Conserv
                                                                                                                       Hoersch, Sebastian
Monahan, John
Meyers, Rachel E.
Bast Jr., Robert C.
Hortobagyi, Gabriel N
                                                                   Sahin, Aysegul
Mills, Gordon B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RAHAOUI, HAKIM
                                                                                                Meric, Funda
                                                                                                               Pusztai, Lajos
                                                                                                                                                                                                                                Myer,
                                                                                                                                                                                                                                                          Gannavarpu, Manjula
Kamatkar, Shubhangi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DIJKHUIZEN,
                                                                                                                                                                                                                                                                                         Zhao, Xumei
                                                                                                                                                                                                                                            Kamatkar, Shubha
Mertens, Maureen
                                                                                                                                                                                                                 Wang, Youzhen
                                                                                                                                                                                                                                                                                                                                                               Application US/10177293
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Pred. No.
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Pred. No.
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Query Match
Best Local Similarity
Friches 5; Conserve
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US-09-853-386-69
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             GENERAL INFORMATION:
APPLICANT: Murphy, Evelyn
APPLICANT: Bresnihan, Barry
APPLICANT: Conneely, Orla
APPLICANT: Fitzgerald, Oliver
TITLE OF INVENTION: Therapeutic Approaches to Diseases by Suppression of the NURR
TITLE OF INVENTION: Subfamily of Nuclear Transcription Factors
                                                                                                                                                   Sequence 69, Application US/09853386 Patent No. US20020049151A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PP7273
PRIOR FILING DATE: 1998-11-20
NUMBER OF SEQ ID NOS: 84
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 36
LENGTH: 299
                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ
SEQ ID NO 498
                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Commonwealth Scientific & Industrial Research TITLE OF INVENTION: Methods of Identifying Antigen Gene SFILE REFERENCE: FF34033/01 CURRENT APPLICATION NUMBER: US/09/861,451A CURRENT FILING DATE: 2001-05-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 60/xxx,xxx
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FILE REFERENCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/299,887 PRIOR FILING DATE: 2001-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:Deduced
OTHER INFORMATION: sequence from clone pAD784
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                     Local Similarity tes 4; Conserv
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                                                                                                                                                                                                                                                                 117 NYOMK 121
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                                                                                                                                                                                                                                                                                                                                                          Score 25;
Pred. No.
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US-09-853-386-69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn version 3.1
SEQ ID NO 69
LENGTH: 446
                                                                                Best
                                                                                              Query Match
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                                                                Matches
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PRIOR FILING DATE: 2000-05-12
NUMBER OF SEQ ID NOS: 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/853,386 CURRENT FILING DATE: 2001-05-11
                                                                                                                                                                                                                         TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                               TOCAT.
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                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: DICKINSON, Todd O
REGISTRATION NUMBER: 28,354
REFERENCE/DOCKET NUMBER: GM10022-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-994-2252
                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/878,672
FILING DATE: 11-Jun-2001
CLASSIFICATION: -Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 7

CORRESPONDENCE ADDRESS: 7

ADDRESSEE: Dechert Price & Rhoads

STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre

CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 19103
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wallis, Nicola G. TITLE OF INVENTION: NOVEL histidine kinase
                                                                                                                                             SEQUENCE DESCRIPTION: SEQ ID NO:
529 NYQMK 533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68 NYELK 72
                                1 NYEMK 5
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                                                                               Similarity
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OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/916,481 FILING DATE: <unknown>
                                                                                                                                                              TOPOLOGY: linear
                                                                                                                                                                                          TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: PA
                                                                                                                                                                                                                                                                          TELEFAX: 215-994-2222
                                                                                                                                                                                                          LENGTH: 554 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Diskette
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                                                              Score 25; DB 9;
Pred. No. 6.2e+02;
1; Mismatches 0
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Pred. No.
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                                                                                          Length 554;
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US-09-878-672-3
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US-09-800-396-4
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                                                                                                                                                                                                                                                                               Sequence 3, Application US/09878672 Publication No. US20030049812A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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Best Local
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TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                               GENERAL INFORMATION
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APPLICATION NUMBER: US/09/800,396
FILING DATE: 06-Mar-2001
CLASSIFICATION: <Unknown>
                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: GM.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/879,531
FILING DATE: <Unknown>
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MEDIUM TYPE: Diskette
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ADDRESSEE: Dechert Price
STREET: 997 Lenox Drive,
                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 4000 Bell Atlantic Tower,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION: NOVEL RESPONSE REGULATOR
NUMBER OF SEQUENCES: 6
                                                                                                                                                                                                   APPLICANT: Wallis, Nicola G.
TITLE OF INVENTION: NOVEL histidine kinase
NUMBER OF SEQUENCES: 7
                                                                                                                                                                                                                                                                                                                                                                                               529 NYQMK 533
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STRANDEDNESS: single
TOPOLOGY: linear
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OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
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ZIP: 08543
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COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                         COUNTRY: US
ZIP: 19103
                                                                                                              STATE: PA
                                                                                                                             CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 554 amino acids
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Pred. No. 6.2e+02;
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RESULT 15
US-09-833-386-64
; Sequence 64, Application US/09853386
; Patent No. US20020049151A1
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn vers
SEQ ID NO 63
LENGTH: 625
TYPE: PRT
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APPLICANT: Murphy, Evelyn
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APPLICANT: Bresnihan, Barr
APPLICANT: Conneely, Orla
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PRIOR APPLICATION NUMBER: US 60/203645
PRIOR FILING DATE: 2000-05-12
                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/853,386
CURRENT FILING DATE: 2001-05-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Therapeutic Approaches to Diseases by Suppression of the NURR TITLE OF INVENTION: Subfamily of Nuclear Transcription Factors FILE REFERENCE: P01972US1
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INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 563 amino acids
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FILING DATE: «Inknown»
ATTORNEY/AGENT INFORMATION:
NAME: Dickinson, Todd Q
REGISTRATION NUMBER: 28,334
REFERENCE/DOCKET NUMBER: GM10022-1
TELEPHONE: 215-994-2222
TELEPAX: 215-994-2222
                                                                                                                                                                                                                                  Local Similarity
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FILE REFERENCE: P01972US1
CURRENT APPLICATION NUMBER: US/09/853,386
CURRENT FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: US 60/203645
PRIOR FILING DATE: 2000-05-12
NUMBER OF SEQ ID NOS: 153
SOFTWARE: Patentin version 3.1
SEQ ID NO 64
LENGTH: 626
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Best Local Similarity
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Search completed: July 11, Job time: 1.4657 secs
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                                                                                                                                                                                                                      ; ORGANISM: HUMAN US-09-853-386-64
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TITLE OF INVENTION: Therapeutic Approaches to Diseases by Suppression of the NURR
TITLE OF INVENTION: Subfamily of Nuclear Transcription Factors
                                                                                                                                                                                                                                                            TYPE: PRT
                                                                       68 NYELK 72
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Conneely, Orla
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Pred. No. 6.9e+02;
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hypothetical prote	neuron-derived rec	hypothetical prote	histidine kinase (. protein T27G7.12 [lipoprotein lplA -	adenylate cyclase	hypothetical prote	methicillin resist	plasminogen activa	hypothetical prote	interleukin-5 rece	probable phosphono	hypothetical prote	glucose 1-dehydrog	formate hydrogenly

ALIGNMENTS

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J. Gen. Virol. 70, 1539-1547, 1989
A;Title: The 1B (NS2), 1C (NS1) and N proteins of human A;Reference number: A32063; MUID:89279331; PMID:2525176
A;Accession: B32063
                                                                                                                                                                                                           nonstructural protein 1B - human respiratory syncytial virus (strain 18537)
N;Alternate names: nonstructural protein NS2
C;Species: human respiratory syncytial virus
C;Date: 31-Mar_1992 #sequence_revision 31-Mar-1992 #text_change 16-Jun-2000
                                                                                                                                                                                                                                                                                                           RESULT
MNNZ15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.1; PID:9333927
R;Elango, N.; Satake, M.; Venkatesan, S.
J. Virol. 55, 101-110, 1985
A;Title: mRNA sequence of three respiratory syncytial virus genes encoding two nonstrap;Reference number: A93010; MUID:85237684; PMID:4009789
A;Accession: C93010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;COllins, P.L.; Wertz, G.W.
Virology 143, 442-451, 1985
A;Title: Nucleotide sequences of the 1B and
A;Reference number: A94336; MUID:86045905; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nonstructural protein 1B - human respiratory syncytial virus C;Species: human respiratory syncytial virus C;Decies: human respiratory syncytial virus C;Date: 30-Jun-1987 #sequence_revision 30-Jun-1987 #text_change C;Accession: B94336; C93010; A04032
A;Molecule.type: mRNA
A;Residues: 1-124 <JOH>
A;Cross-references: EMBL:D00736; NID:g222559; PIDN:BAA00636.1; PID:g222561
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A; Residues: 1-54, 'R', 56-124 <ELA>
A; Cross-references: GB:M11486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: genomic RNA
A; Residues: 1-124 <COL>
                                                                                                                                                                                          C; Accession: B32063
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Superfamily: respiratory syncytial virus nonstructural protein; Keywords: nonstructural protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                      64 NYEMK 68
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5; Conserv
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Pred. No.
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Mismatches
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PMID:2998021
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                                                                                                                     respiratory syncytial virus (
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RESULT 3
A49166
3',5'-cyclic-AMP phosphodiesterase (EC 3.1.4.-), cy
3',5'-cyclics: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994
C;Accession: A49166
R;LeBon, T.R.; Kasuya, J.; Paxton, R.J.; Belfrage,
Endocrinology 130, 3265-3274, 1992
A;Title: Purification and characterization of guano
                                     RESULT
T25790
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  probable hydrolase from alpha/beta family, YQKD B. subtilis ortholog [imported] C;Species: Clostridium acetobutylicum C;Date: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 14-Sep-2001 C;Accession: D97235
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A;Gene: 1B
C;Superfamily: respiratory syncytial virus nonstructural protein
C;Keywords: nonstructural protein
   hypothetical protein F53E10.
C; Species: Caenorhabditis el
                                                                                                                                                                                                                                         A; Gene:
                                                                                                                                                                                                                                                                                                                                                                A; Reference number: A96900; A; Accession: D97235
                                                                                                                                                                                                                                                                                                                                                                             A; Title: Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium A; Reference number: A96900; MUID:21359325; PMID:21359325
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                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-330 <KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                               R; Nolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, K.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Keywords: cGMP binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Status: preliminary
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                                                                                                                                                                                           Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Superfamily: cyclic-nucleotide phosphodiesterase, cGMP-inhibited; 
Keywords: cGMP binding; phosphoric diester hydrolase
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                                                                                                       209 NYEMK 213
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                                                                                                                                                                         Conservative
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                   Caenorhabditis elegans
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Pred. No.
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PMID:1317779
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10;
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ATCC824
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                                                                                                                                                                                                       Length 330,
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                                                                                                                                                                                                    cytochrome P450 homolog F23K16.120 - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 16-Feb-2001 C;Accession: T09365
                                                                                                   A; Molecule type:
A; Residues: 1-47
                                                                                                                                     A; Reference number: A; Accession: T09365
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                A; Map position:
                                   A; Gene: ATSP: F23K16.120
                                                                   A; Experimental source: cultivar
                                                                                     A; Cross-references:
                                                                                                                                                                     submitted to the Protein
                                                                                                                                                                                     R; Bevan, M.; Murphy, G.; Ridley, P.; Hudson,
                                                                                                                                                                                                                                                                                             RESULT
Superfamily:
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1-479 <BEV>

EMBL: AL078620;

Columbia;

BAC clone

GSPDB:GN00062; ATSP:F23K16.120

DNA

otein Sequence Database, 216652

s.;

Bancroft, 1999

Η.;

Mewes,

H.W.; Mayer,

Candida cytochrome P450 52A3;

cytochrome P450 homology

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A; Status, ...
A; Molecule type: DNA
A; Residues: 1-420 <KUR>
A; Cross-references: GB: AE001437; PIDN: AAK80997.1;
A; Cross-references: Clostridium acetobutylicum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Date:
C;Access
R;Beck,
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B97276
                                                                                                                                                                                                                                                         A; Title: Genome Sequence and Comparative Analysis of the A; Reference number: A96900; MUID:21359325; PMID:21359325
                                                                                                                                                                                                                                                                                       R;Nolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, K.S.; Daly, M.J.; Bennett, G.N.; Koonin, E.V.; Smith, D.R. J. Bacteriol. 183, 4823-4838, 2001
                                                                                                                                                                                                                                                                                                                                       glycosyltransferase {imported} - Clostridium acetobutylicum
C;Species: Clostridium acetobutylicum
C;Date: 14-Sep_2001 #sequence_revision 14-Sep-2001 #text_change 14-Sep-2001
C;Accession: B97276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 submitted to the EMBL Data Library, February 1997 A; Description: The sequence of C. elegans cosmid
                                                                                                                           A; Gene:
                                                                                                                                                                                                                                        A; Accession: B97276
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A;Map position: 5
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                                                                          Query Match
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Best Local
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                                                                                                                           CAC3057
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191 NYEMK 195
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5; Conserv
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5; Conserv
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                                                             Conservative
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e: strain Bristol N2; clone F53E10
                                                                        100.0%;
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Pred.
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Pred. No.
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                                                                        No.
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ATCC824
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                                                                                         Length 420;
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RESULT 8
$4993
$4993
Nypothetical protein YIL045w - yeast (Saccharomyces cerevisiae)
Nypothetical protein yi9905.03
NyAlternate names: hypothetical protein yi9905.03
C:Species: Saccharomyces cerevisiae
C:Species: Saccharomyces cerevisiae
C:Date: 13-Jan-1995 #sequence_revisiae
C:Date: 13-Jan-1995 #sequence_revision 20-Feb-1995 #text_change 06-Feb-1998
C:Accession: $49933
R:Odell, C:: Bowman, S.
submitted to the EMBL Data Library, December 1994
                                                                                                                                                                                                                                                                                                                                    hypothetical protein C0420w - malaria parasite (Plasmodium falciparum) C;Species: Plasmodium falciparum C;Species: Plasmodium falciparum C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 11-Jan-2002 C;Accession: T18445
R;Lawson, D.; Bowman, S.; Barrell, B. submitted to the EMBL Data Library, August 1997
A;Reference number: Z18935
A;Accession: T18445
                            RESULT 10
T14277
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T18445
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C:Superfamily: glucoamylase starch-binding domain
F:396-516/Domain: glucoamylase starch-binding doma
myosin-like
N;Alternate
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                                                                                                                                                                                                                               A; Map position: 3
A; Introns: 326/3;
                                                                                                                                                                                                                                                                            A; Residues: 1-608 <LAW>
A; Cross-references: EMB
                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-608 <L
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A;Map position: 9L
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A; Residues: 1-538 <ODE>
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                                                                                                                                                                                                                   A; Note:
                                                                                                                                                                                                                                                                                                                      A; Status: preliminary; translated
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                                                                                                                                                                    Query Match
Best Local
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protein my3 - common sunflow names: unconventional myosin
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5; Conserv
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               sunflower
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Pred. No. 53;
Mismatches
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Pred. No.
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RESULT
I36921
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C:Date: 20-Sep:1999 #sequence_revision 20-Sep-1999 #text_change 23-Mar-2001
C:Accession: T14277
                                                                                        A, Title: Evolutionary relationships among A; Reference number: I36899; MUID:92307745; A; Accession: I36921
                                                                                                                                           R;Kenter, M.; Otting, N.; Anholts, J.; Leunissen, J.A.M.; Jonker, M.; Bontrop, R.E. Immunogenetics 36, 71-78, 1992
                                                                                                                                                                              gene MHC DQ-alpha 1 protein - hamadryas baboon (fragment) C;Species: Papio hamadryas (hamadryas baboon) C;Date: 07-Jun-1996 #sequence_revision 07-Jun-1996 #text_C;Accession: I36921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Note: U31
C;Superfamily: varicella-zoster virus 240K tegument protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       submitted to the EMBL Data Library, December 1995 A; Description: Determination and analysis of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Superfamily: myosin motor domain homology F;168-807/Domain: myosin motor domain homology
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A; Residues: 1-900 < VUG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data Library, A; Description: Molecular cloning of
A;Cross-references: GB:M76226; NID:g176597; PIDN:AAA35391.1; PID:g176598 C;Superfamily: class II histocompatibility antigen; immunoglobulin homolo
                                       A; Molecule type: DNA
A; Residues: 1-62 < RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary; translated A;Molecule type: DNA
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A; Accession: T41933
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                                                                       A; Status: preliminary; translated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Experimental source: strain
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Best Local
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Best Local
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5; Conserv
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5; Conserv
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ce: strain JI
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Pred.
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Pred. No.
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a new mini myosin
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                                                                                                           the primate MHC-DQA1 and PMID:1612647
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A;Reference number: S40735
A;Accession: S40739
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-75 <HAW>
A;Cross-references: EMBL: Z29
C;Genetics:
                               rfal protein - Salmonella typhimurium C;Species: Salmonella typhimurium C;Decies: Salmonella typhimurium C;Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 08-Oct-1999 C;Accession: S12097 R;Carstenius, P.; Flock, J.I.; Lindberg, A. Nucleic Acids Res. 18, 6128, 1990 Nucleic Acids Res. 18, 6128, 1990 A;Title: Nucleotide sequence of rfal and rfal genes encoding lipopolysaccharide glycosyl A;Reference number: S12097; MUID:91045080; PMID:2235496
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$40739
Syothetical protein ZK507.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 06-Uan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Sep-1997
C;Accession: $40739
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A; Residues: 1-62 <RES>
A; Cross-references: GB.M76229; NID:g342161; PTDN:AAA36870.1; PID:g342162
C; Superfamily: class II histocompatibility antigen; immunoglobulin homolo
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C;Species: Macaca mulatta (rhesus macaque)
C;Date: 07-Jun-1996 #sequence_revision 07-Jun-1996 #text_change 23-Jul-1999
C;Accession: I61802
A; Status: preliminary
                     A; Reference number: A; Accession: S12097
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Best Local :
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085305 human respi
085305 human sapien
075635 homo sapien
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075636 homo sapien
091068 mus musculu
P52362 human herpe
09x525 lactobacill
045251 bradyrhizob
136416 dictyostell
145251 bradyrhizob
136416 dictyostell
191592 saccharomyc
191816 salmonella
1953298 saccharomyc
059070 methanococc
071183 mus musculu
192524 rattus norv
197524 mycoplasma
067012 aquifex aeo
192258 acetogenium
06708 saccharomyc
08466 rickettsia
1926769 rattus norv
16419 gallus gall
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ALIGNMENTS

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VNS2_HRSV1 STANDARD; PRT; 124 AA. P24569; 01-MAR-1992 (Rel. 21, Created) 01-MAR-1992 (Rel. 21, Last sequence update) 01-MAR-1992 (Rel. 21, Last annotation update) Nonstructural protein 2 (Nonstructural protein 1B). 1B OR NS2. 1B OR NS2. Human respiratory syncytial virus (subgroup B / strain 18537). Viruses; ssrNA negative-strand viruses; Mononegavirales; Paramyxoviridae; Pneumovirinae; Pneumovirus.	I NYEMK 5 64 NYEMK 68 T 2 T 2 THRSVI	Query Match 100.0%; Score 28; DB 1; Length 124; Best Local Similarity 100.0%; Pred. No. 6.1; Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	B47548B0D5FB8FFD CRC64;	h a collabora EMBL outstati trictions on is in no nd for commer -sib.ch/annou	SEQUENCE FROM N.A. MEDILINE-95146950; PubMed-7844532; Pastey M.K., Samal S.K.; Pastey M.K., Samal S.K.; "Nucleotide sequence analysis of the non-structural NSI (1C) and NS2 "Nucleotide sequence analysis of the non-structural virus."; (1B) protein genes of bovine respiratory syncytial virus."; J. Gen. Virol. 76:193-197(1995).	Bovine respiratory syncytial virus (strain A51908) (BRS). Viruses; ssRNA negative-strand viruses; Mononegavirales; Paramyxoviridae; Pneumovirinae; Pneumovirus. NCBI_TaxID=11247;	15-JUL-1998 (Rel. 36, Created) 15-JUL-1998 (Rel. 36, Last sequence update) 15-JUL-1998 (Rel. 36, Last annotation update) Nonstructural protein 2 (Nonstructural protein 1B).	

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"The 1B (NS2), 1C (NS1) and N proteins of human respiratory syncytial virus (RSV) of antigenic subgroups A and B: sequence conservation and divergence within RSV genomic RNA.";
J. Gen. Virol. 70:1539-1547(1989).
MEDLINE=97187925; PubMed=9035372; Crowe J.E. Jr., Firestone C.Y., W Murphy B.R.;
                                                                                                                                  MEDLINE-95266253; PubMed-7747420; Connors M., Crowe J.E. Jr., Firestone C.Y., Murphy B.R., Collins P. "A cold-passaged, attenuated strain of human respiratory syncytial virus contains mutations in the F and L genes."; Virology 208:478-484(1995).
                                                                                                                                                                                                                                                                                                                                                   t wo
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"Nucleotide sequences of the 1B and 1C human respiratory syncytial virus.";
Virology 143:442-451(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE-86045905; PubMed-2998021;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human respiratory syncytial virus (strain A2).
Viruses; ssRNA negative-strand viruses; Mononegavirales;
Preumoviridae; Pneumovirinae; Pneumovirus.
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NA sequence of three respiratory syncytial virus genes encoding
nonstructural proteins and a 22K structural protein.";
virol. 55:101-110(1985).
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                                                                                                                                                                                  use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fc entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                           Karron R.A., Buonagurio D.A., Georgiu A.F., Whitehead S Adamus J.E., Clements-Mann M.L., Harris D.O., Randolph V Udem S.A., Murphy B.R., Sidhu M.S.; Submitted (JUL-1997) to the EMBL/GenBank/DDBJ databases.
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Viruses; ssRNA negative-strand viruses; M
Paramyxoviridae; Pneumovirinae; Pneumovir
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15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1998 (Rel. 36, Last annotation update)
Nonstructural protein 2 (Nonstructural protein
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Nonstructural protein. SEQUENCE 124 AA; 14567
                                              Pfam; PF03113; RSV_NS2; 1.
                                                                             EMBL; AF013255; AAB82441.1; InterPro; IPR004336; RSV_NS
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Pfam; PF03113; RSV_NS2;
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passaged human respiratory syncytial virus vaccine candidate resul
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                                                                                                                                                     Alansari H.M., Potgieter L.N.D.;

"Nucleotide and predicted amino acid sequence respiratory syncytial virus non-structural IC small hydrophobic protein gene.";

J. Gen. Virol. 75:401-404(1994).
                                                                                                                                                                                                                                                                                                                                                                                         Ovine respiratory syncytial virus (strain WSU 83-1578) (Viruses; ssRNA negative-strand viruses; Mononegavirales; Paramyxoviridae; Pneumovirinae; Pneumovirus.
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Q65707; .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mazumder B., Dupuy L. Submitted (AUG-1995)
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Viruses; 9sRNA negative-strand viruses; Mononegavirales;
Paramyxoviridae; Pneumovirinae; Pneumovirus.
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                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE-94157498; PubMed-8113762;
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European Bioinformatics Institute. The property of the property institutions as long the and this statement is not removed.
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2 (Nonstructural protein 1B).
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                                                                                                                                                                                                                                                                     the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Miyata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE-Mesangial cells;
MEDLINE-98376492; Pubmed-9710452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tsujimoto M., Tsuruoka N., Ishida N., Kurihara T., Iwasa F., Yamashiro K., Rogi T., Kodama S., Katsuragi N., Adachi M., Katayama T., Nakao M., Yamashif K., Hashino J., Haruyama M., Miura Nakanishi T., Nakazato H., Teramura M., Mizoguchi H., Yamaguchi N.; "Purification, CDNA cloning, and characterization of a new serpin w megakaryoyte maturation activity."; J. Biol. Chem. 272:15373-15380(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation updat Megsin (TP55) (Serpin B7).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SPB7_HUMAN 075635;
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InterPro; IPR004336; RSV_NS2;
Pfam; PF03113; RSV_NS2; 1.
Nonstructural protein.
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                                                                                                                                                                                                                                                   entities
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    -!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
    -!- TISSUE SPECIFICITY: Predominantly expressed in mesangial cells
    -!- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "A mesangium-predominant gene, megsin, IgA nephropathy.";
J. Clin. Invest. 102:828-836(1998).
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Okubo K., Kurokawa K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                           HSSP; P05619;
                                                                                                                                                                                                                         or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE=97326116; PubMed=9182567;
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                                                                                                 Genew;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clin. Invest. 102:828-836(1998). FUNCTION: Might function as an proteases. Might influence the its action as a serpin.
                                                                                                                                               D88575; BAA31232.1;
AF027866; AAC64506.
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HGNC:13902;
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5; Conserv
                                                                                                                                                                                                                         s requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
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InterPro; IPR000215; Pfam; PF00079; serpii SMART; SM00093; SERP

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Serpin; S
ACT_SITE
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Barrell B.G., Badcock K., Bankier A.T., Bowman S., Brown D.,
Churcher C.M., Connor R., Copsey T., Dear S., Devlin K., Fraser
Gentles S., Hamlyn N., Horsnell T.S., Hunt S., Jagels K., Jones
Louis E., Lye G., Moule S., Moule T., Odell C., Pearson D.,
Rajandream M.A., Riles L., Rowley N., Skelton J., Smith V.,
Walsh S.V., Whitehead S.;
Submitted (DEC-1994) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                        modified and this statement is not removed. entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entrepean Bioinformatics Institute. There are no restues by non-profit institutions as long as its content
                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     that interacts with the yeast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cheng C., Huang
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
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01-FEB-1995 (Rel. 31, Last sequence up
01-NOV-1997 (Rel. 35, Last annotation
GSY2 interacting protein PIG2.
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PIG genes: PIG1 encodes a
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347 348 REACT
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                                                                                                                                            Score 28;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s a putative type 1 phosphatase glycogen synthase Gsy2p.";
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                                                                                                                                                                                              73ED8F5CC6692172 CRC64;
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                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      (GLC7).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       538
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     SYNTHASE 2
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                                                                                                                                               28;
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19;
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                                                                                                                                                           Length 538;
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                                                                                                                              Indels
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-!- SIMILARITY: CONTAINS 1
BINDING DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                   PRINTS;
PRINTS;
                                                                                                                                                                                                                                                                                                                                                                                        EMBL; A
EMBL; A
HSSP; F
Genew;
                  ProDom;
ProDom;
                                                                                                                                          Pfam;
Pfam;
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InterPro;
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InterPro;
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InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=Breast, and Colon carcinoma;
MEDLINE=98371222; PubMed=9705494;
Mrenkle T., Welsh J., Jung B., Mathieu-Daude F., McClelland
"Non-stoichiometric reduced complexity probes for cDNA array
Nucleic Acids Res. 26:3883-3891(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q9UKW4; 095230; 09Y5X8;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation updat
                                                                                                                                                                             Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vav family of oncoproteins. Mol. Cell. Biol. 19:7870-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota;
Mammalia; F
                                                                                                                                                                                                                                               InterPro;
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-!- SIMILARITY: CONTAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Movilla N., Bustelo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A., AND ALTERNATIVE MEDLINE-99455043; PubMed-10523675;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          leic acids Res. 26:3883-3891(1998).
FUNCTION: EXCHANGE FACTOR FOR GTP-BINDING
TO A LESSER EXTENT, RAC-1. BINDS PHYSICALI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATES OF THOSE GTPASES.
ALTERNATIVE PRODUCTS: 2 ISOFORMS; ALPHA (SHOWN HERE)
ARE PRODUCED BY ALTERNATIVE SPLICING.
                                                                                                                                       pe00017; SH2; 1.
pe00018; SH3; 1.
pe00130; DAG_PE-bind; 1
pe00169; PH; 1.
                                                                                                                                                                                                                                                                                                                                                                         w; HGNC:12659; VAV3.
605541; -.
                                                                                                        PF00307;
PF00621;
                                                                                                                                                                                                                                                                                                                                                                                                        AFI18887; AAD20349.1; -. AFI18886; AAD20348.1; -. AF067817; AAC79695.1; -. P29355; ISEM.
                                                                   PR00401; SH2DOMAIN.
PR00452; SH3DOMAIN.
                                                      PR00888; SM22CALPONIN
                                                                                                                                                                                                                                                                                                  IPR002219; DAG_PE-bind.
IPR001331; GDS_CDC24.
                                                                                                                                                                                                                                                                                                                                      IPR001715;
                                                                                                                                                                                                                IPR003096;
                                                                                                                                                                                                                                                                                                                                                       IPR003247;
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                                                                                                                                                                                                                                                                                   IPR001849; PH.
                                                                                                                                                                                                                                                  IPR000980;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Metazoa;
                                                                                                        CH; 1.
RhoGEF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19:7870-7885(1999).
                                  SH3;
CH_type;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X.R.;
                                                                                                                                                                                                                                                 SH2.
                                                                                                                                                                                                                                                                                                                                 CH_type.
Calponin-like.
                                                                                                                                                                                                                                SH3
                                                                                                                                                                                                              SM22_calponin
                                                                                                                                                                                                                                                                   RhoGEF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S 1 CALPONIN-HOMOLOGY
S 1 DBL-HOMOLOGY (DH)
S 1 PH DOMAIN.
S 1 ZINC-DEPENDENT PHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 -
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SH3 DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                properties
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Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPLICING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-BINDING PROTEINS RHOA, RHOG AND, PHYSICALLY TO THE NUCLEOTIDE-FREE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of Vav-3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vertebrata;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PHORBOL-ESTER AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CH) DOMAIN DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ø
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VAV3_MOUSE
ID VAV3_ACC
ID VAV3_ACC
OPTO 16-OCC
DT 16-OCC
DT 15-JU
DE Vav3_
GR VAV3_
OCC Eukar
OCC Mamma
OC MAMMA
OCC PT Trenk
RA Trenk
RA Trenk
RA Trenk
RA Trenk
RA Trenk
RA Gene
CCC -1- E
CCC -1- S
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RY MEDLINE-20179693; Pubmed-10713454;

RA Trenkle T., McClelland M., Adlkofer K., Welsh J.;

RA Trenkle T., McClelland M., Adlkofer K., Welsh J.;

RA Trenkle T., McClelland M., Adlkofer K., Welsh J.;

RA Trenkle T., McClelland M., Adlkofer K., Welsh J.;

RA Trenkle T., McClelland M., Adlkofer K., Welsh J.;

RA Trenkle T., McClelland M., Adlkofer K., Welsh J.;

RT Janine nucleotide exchange factors.";

RI Gene 245:139-149(2000).

CC -1- FUNCTION: EXCHANGE FACTOR FOR GTP-BINDING PROTEINS RHOA, RHOG AND,

CC -1- ALTERNATIVE PRODUCTS. RAC-1. BINDS PHYSICALLY TO THE NUCLEOTIDE-FREE

CC STATES OF THOSE GTPASES (BY SIMLERITY).

CC -1- ALTERNATIVE PRODUCTS: 2 ISOFORMS; ALPHA (SHOWN HERE) AND BETA;

CC -1- SIMILARITY: CONTAINS 1 SOLPONNIN-HOMOLOGY (CH) DOMAIN.

CC -1- SIMILARITY: CONTAINS 1 DBL-HOMOLOGY (DH) DOMAIN.

CC -1- SIMILARITY: CONTAINS 1 PH DOMAIN.

CC -1- SIMILARITY: CONTAINS 1 ZINC-DEPENDENT PHORBOL-ESTER AND DAG

CC -1- SIMILARITY: CONTAINS 1 SH2 DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS50021; CH; 1.

PROSITE; PS00479; DAG_PE_BIND_DOM_2; 1.

PROSITE; PS50081; DAG_PE_BIND_DOM_2; 1.

PROSITE; PS50010; DH_2; 1.

PROSITE; PS50010; DH_1; 1.

PROSITE; PS50003; PH_DOMAIN; 1.

PROSITE; PS50001; SH2; 1.

PROSITE; PS50001; SH3; 2.

PROSITE; PS50002; SH3; 2.

Phorbol-ester binding; Zinc; SH2 domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CONFLICT
CONFLICT
CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                           MOUSE
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DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMART;
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                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                      Q9R0C8;
16-OCT-2001 (Rel. 40,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SMART;
                                                                                                                                                                                                                                                                         VAV3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Guanine-nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART;
                                                                                                                                                                                                               NCBI_TaxID=10090;
[1]
                                                                                                                                                                                                                                                            Mus musculus
                                                                                                                                                                                                                                                                                              16-OCT-2001 (Rel. 40, 15-JUN-2002 (Rel. 41,
                                                                                                                                                                                                                                                                                                                                               VAV3_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
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5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                           NYEMK 442
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217
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Rodentia;
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Last
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CH.
DH.
PH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SH3 1.
SH2.
SH3 2.
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LLCQLLNNLRAHSINLKEINLRPQMSQFLCLKNIRTFLTAC
CETFGMRKSELFEAFDLFDVRDFGK -> MQLPDCPCRAHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHORBOL-ESTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 28;
Pred. No.
                                                                                                                                                                                                                                  Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (IN ISOFORM BETA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C1E29F0B094CB721
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                              on update)
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                                                                                                                                                                                                                                                                                                                                               847
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REF.
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CRC64;
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RESULT 11
TEGU_HSV7J
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                                                                                                                                                                                                 Query Match
Best Local S
Matches 5
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PROSITE; PS00479; DAG_PE_BIND_DOM_1; 1

PROSITE; PS50081; DAG_PE_BIND_DOM_2; 1

PROSITE; PS50010; DH_2; 1.

PROSITE; PS500741; DH_1; 1.

PROSITE; PS50003; PH_DOMAIN; 1.

PROSITE; PS50001; SH2; 1.

PROSITE; PS50002; SH3; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PRO0401; SH2DOMAIN.
PRINTS; PRO0452; SH3DOMAIN.
PRINTS; PRO0885; SM22CALPONIN.
PRODOM; PRO0806; SH3; 1.
PRODOM; PD000096; SH2; 1.
PRODOM; PD000157; CH_type; 1.
SMART; SM00109; C1; 1.
SMART; SM00233; CH; 1.
SMART; SM00235; RhOGEF; 1.
TEGU_HSV7J
P52362;
01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR001849; InterPro; IPR000219; InterPro; IPR000980; InterPro; IPR001452; InterPro; IPR003096; InterPro; IPR003096; InterPro; IPR003096; InterPro; IPR003096; InterPro; IPR003096; InterPro; IPR003096; IPR0003096; IPR003096; IPR0003096; IPR0
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HSSP;
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                                                                                                                                                                                                                                                                                                                              DOMAIN
DOMAIN
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DOMAIN 1
DOMAIN 192
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InterPro; IPR002219;
InterPro; IPR001331;
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                                                                                                                                                                                                                                                                                            DOMAIN
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PF00018; SH3; 1.
PF00130; DAG_PE-bind;
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P29355; 19
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SM00326;
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5; Conserv
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IPR003247; CH
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0002; SH3;
binding;
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SH3;
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DAG_PE-bind.
GDS_CDC24.
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SH2.
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Zinc;
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PHORBOL-ESTER AND DAG BIND:

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SH3 2.

SH3 2.

SH3 2.
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16-OCT-2001 (Rel. 4
16-OCT-2001 (Rel. 4
16-OCT-2001 (Rel. 4
                                                                                                                                                                                                              STRAIN-TK1214;

COTON E., Visser J.J., Van Vuuren H.J.J.;

"Urease operon of Lactobacillus fermentum.";

Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.

-I- FUNCTION: INVOLVED IN UREASE METALLOCENTER ASSEMBLY. BINDS NICKEL.
                                                                             This SWISS-PROT entry is copyright. It is produced through a copyrender the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. That are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and foentities requires a license agreement (See http://www.isb-sib.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LACFE
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                                                                                                                                                                                                                                                                                                                                               Bacteria; Firmicutes; Lactobacillus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U43400; AAC54693.1; -. SEQUENCE 2059 AA; 239476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (JAN-1996) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: TEGUMENT PROTEIN.
-!- SIMILARITY: BELONGS TO FAMILY THAT GROUPS TOGETHER HSV-1 UL36,
--- EHV-1 24, EBV BPLF1, HVS-1 64, VZV 22, AND HCMV UL48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alphaherpesvirinae; NCBI_TaxID=57278;
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16-OCT-2001
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                                        AF120718; AAD22481.1;
              PF02814;
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                           IPR004029;
                                                                   email to license@isb-sib.ch).
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Last annotation update)
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Best Local :
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METAL
CONFLICT
CONFLICT
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bradyrhizobium japonicum.
Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
Bradyrhizobium group; Bradyrhizobium.
NCBI_TaxID-375;
                                                                                                                                                                                                                                                                                                                                                                    Fu C., Maier R.J.; "Sequence and characterization of three genes within the gene cluster of Bradyrhizobium japonicum.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q45251; Q45249;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
                                                                                                Hydrolase;
METAL
                                                                                                                                                     InterPro; IPR004419; HupD.
InterPro; IPR000671; Hydrg
Pfam; PF01750; HycI; 1.
                                                                                                                                                                                      HSSP; P37182; 1C)
MEROPS; M52.001;
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                                                                                                                                             PRINTS; PRO0446;
                                                                                                                                                                                                                                                                                                                               HYDROGENASE.
-!- SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                                                                                                                                      -!- FUNCTION: NOT KNOWN.
                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-USDA
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. STRAIN=USDA 110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Mol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  van Soom C., Browaeys J., Verreth C., Vanderleyden J.;
"Nucleotide sequence analysis of four genes, hupC, hupD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=94047099; PubMed=8230232;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JUN-2002 (Rel. 41, Last annotation update) Hydrogenase expression/formation protein hupD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUPD_BRAJA
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TIGR00140; hupD; 1.
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234:508-512(1993).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    use by non-profit institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                Susek R.E., Lindquist S.L.;

"hsp26 of Saccharomyces cerevisiae is related to the superfamily small heat shock proteins but is without a demonstrable function. Mol. Cell. Biol. 9:5265-5271(1989).
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Transferase; Acyltransferase.
SEQUENCE 203 AA; 23415 MW;
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Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: SEEMS TO BE INVOLVED IN N-ACETYLATION (BY SIMILARITY).
-i- SIMILARITY: BELONGS TO THE ACETYLTRANSFERASE FAMILY. ARD1
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01-JUN-1994 (Rel. 29,
30-MAY-2000 (Rel. 39,
SEQUENCE FROM N.A
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Eukaryota: Fungi; Ascomycota: Saccharomycotina: Saccharomycetes:
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PIR; S45465; S45465.
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INIT_MET
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Bossier P., Fitch I.T., Boucherie H., Tuite M.F.;
"Structure and expression of a yeast gene encoding heat-shock protein Hsp26.";
Gene 78:323-330(1989).
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-1- INDUCTION: BY HEAT SHOCK, AND UNDER COHER CONDITIONS SUCH AS INCREASED SALT CONCENTRATION AND STARVATION.
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                                                                                                            Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                  01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
cGMP-inhibited LOW K(M) cAMP phosphodiesterase PEAK 37, CGI-PDE
                                                                                                                                                                                                                                                                                     Q9UCP3;
                                                                                                                                                                                                                                                                                             Q9UCP3
                                                                                                                                                                                    MEDLINE-92283180; PubMed-1317779;
                                                                                                                                                                                              SEQUENCE.
                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                             (Fragment)
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                                                         1 NYEMK 5
                                                                              5; Conserv
                                               NYEMK 10
                                                                               Conservative
                                                                                                                                                                                                                                                                                             PRELIMINARY;
         PRELIMINARY;
                                                                                       100.0%;
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                                                                                       Score 28;
Pred. No. 3
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Best Local 9
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Best Local :
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01-MAY-1999 (TREMBLrel. 10, L
01-DEC-2001 (TREMBLrel. 19, L
Nonstructural protein 2.
NS2.
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Submitted (MAR-1998) to the EMBI
EMBL; AF054664; AAC36667.1; -
InterPro; IPR004336; RSV_NS2.
Pfam; PF03113; RSV_NS2; 1.
SEQUENCE 124 AA; 14677 MW;
                                                                                                                                                                     Q9YWM8;
01-MAY-1999
01-MAY-1999
01-DEC-2001
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01-NOV-1998
01-DEC-2001
  Bovine respiratory syncytial virus. Viruses; ssRNA negative-strand viruses; Paramyxoviridae; Pneumovirinae; Pne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Larsen L.E., Gottshalch E., Blixenkrone-Moller M.; Submitted (MAR-1998) to the EMBL/GenBank/DDBJ data EMBL; AF054665; AAC36670.1; -. Interpro; IPR004336; RSV_NS2.
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Viruses; ssRNA negative-strand viruses; Mono
Paramyxoviridae; Pneumovirinae; Pneumovirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bovine respiratory syncytial virus.
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                                                                                                                                              Nonstructural
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EMBL/GenBank/DDBJ databases
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Pred. No.
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                               Pneumovirus.
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39;
                                                            Mononegavirales;
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Matches 5
Larsen L.E., Gottshalch E., Bli. Submitted (MAR-1998) to the EMB EMBL; AF054668; AAC36679.1; -. InterPro; IPR004336; RSV_NS2. Pfam; PF03113; RSV_NS2; 1. SEQUENCE 124 AA; 14605 MW;
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Submitted (MAR-1998) to the EME
EMBL; AF054666; AAC36673.1; -.
InterPro; IPR004336; RSV_NS2.
Pfam; PF03113; RSV_NS2; 1.
SEQUENCE 124 AA; 14635 MW;
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01-MAY-1999 (TrEMBLrel. 1
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Nonstructural protein 2.
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                                                                                                           SEQUENCE FROM N.A. STRAIN=9314893; Larsen L.E., Gotts
                                                                                                                                                                                                                   Bovine respiratory syncytial virus. Viruses; ssRNA negative-strand viruses; Paramyxoviridae; Pneumovirinae; Pneumov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Larsen L.E., Gottshalch E., Blixenkrone-Moller M.; Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases. EMBL; AF054667; AAC36676.1; -. InterPro; IPR004336; RSV_NS2. Pfam; PF03113; RSV_NS2; 1. SEQUENCE 124 AA; 14649 MW; 353112D19ABE8EB5 CRC64;
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STRAIN=9402020;
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                                                                                                                                                                                             Paramyxoviridae;
NCBI_TaxID=11246;
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Viruses; ssRNA negative-strand viruses; Mon
Paramyxoviridae; Pneumovirinae; Pneumovirus
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EMBL/GenBank/DDBJ data
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPECIES-Bovine respiratory syncytial virus; STRAIN-ATUE51908; MEDLINE-99102581; PubMed-9847328; Buchholz U.J., Finke S., Conzelmann K.K.; "Generation of bovine respiratory syncytial virus (BRSV) from cDNA: BRSV NS2 is not essential for virus replication in tissue culture, the human RSV leader region acts as a functional BRSV genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bovine respiratory syncytial virus, and Bovine respiratory syncytial virus (strain A51908) (BRS). Viruses; ssRNA negative-strand viruses; Mononegavirales; Paramyxoviridae; Pneumovirinae; Pneumovirus. NCBI_TaxID=11246, 11247;
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MEDLINE-97185152; PubMed-9032893;
Tolley K.P., Marriott A.C., Simpsc
Longhurst S.J., Evans J.E., Johnsc
Pringle C.R.;
Tdenrice:
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EMBL; U39662; AAC57021.1;
EMBL; U39661; AAC57031.1;
InterPro; IPR004336; RSV_N
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Bacteria; Proteobacteria;
Bradyrhizobium group; Brac
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                                                                                                                                                                                                                              Potential symblosis-specific genes
DNA region of the Bradyrhizobium jap
J. Bacteriol. 18::1405-1412(2001).
EMBL; AF322012; AAG60707.1;
                                                                                                                                                                                                                                                                                                                                                  MEDLINE-21101824; PubMed-11157954; Gottfert M., Rothlisberger S., Kun Hennecke H.;
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72; hydrog_prot; 1.
SUGAR_TRANSPORT_1; UNKNOWN_1.
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Easton A.J.,
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Knowles B., Boon T.;
Knowles B., Boon T.;
A new family of mouse genes homologous to Genomics 55:176-184(1999).

EMBL; AJ005532; CAA06586.1; -.
MGD; MGI:1333827; Magea8.
InterPro; IPR001092; HIH_basic.
R InterPro; IPR002190; MAGE.
R InterPro; IPR002190; MAGE.
PFam; PF01454; MAGE; 1.

PROSITE; PS00038; HELIX_LOOP_HELIX; UNKNC PROSITE; PS00038, HELIX_LOOP_HELIX; UNKNC PROSITE; PS00038, HELIX_LOOP_HELIX; UNKNC PROSITE; PS00038; PS00
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01-NOV-1998 (TrEMBLrel. C
01-MAR-2002 (TrEMBLrel. 2
Magea6 protein.
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Mus musculus (Mouse).
Mus musculus (Mouse).
Metazoa; Chordata;
Metazoa; Rodentia;
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InterPro;
                                                                *Rnowles B., Boon T.;

"A new family of mouse genes homologous Genomics 55:176-184(1999).

EMBL; AJ005530; CAA06584.1; -.

MGD; MGI:1333837; Magea6.
                                                                                                                                                                                               De Plaen E., de Backer O., Arnaud
Martelange V., Avner P., Baldacci
                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                         TISSUE-LIVER;
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Martelange V., Avner P., Baldacci P.,
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Rodentia;
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STRAIN-ATCC 824 / DSM 792 / VKM B-1787;

MEDLINE-21359325; PubMed-11466286;

Noelling J., Breton G., Omelchenko M.V., Makaro Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J Tatusov R.L., Sabathe F., Doucette-Stamm L., So Bennett G.N., Koonin E.V., Smith D.R.;

"Genome sequence and comparative analysis of th bacterium Clostridium acetobutylicum.";

J. Bacteriol. 18:4823-4838 (2001).

EMBL; ABD07770; AAK80671.1;

InterPro: IPR000379; Ser_estrs_site.
SEQUENCE EXECUTION 12;
STRAIN-BRISTOL N2;
STRAIN-BRISTOL N2;
MEDLINE-94150718; PubMed-7906398;
Milson R., Ainscough R., Anderson K., Baynes C., Berks M.,
Wilson R., Burton J., Connell M., Copsey T., Cooper J.,
Bonfield J., Burton J., Connell R., Favello A., Fulton
Craxton M., Dear S., Du Z., Durbin R., Favello A., Fulton
Craxton M., Dear S., Bu Hawkins T., Hillier L., Jier M., Jol
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01-MAY-1997 (TreMI
01-DEC-2001 (TreMI
F53E10.5 protein.
F53E10.5.
                                                                                                                                                                                                                   Caenorhabditis elegans.
Eukaryota; Metazoa; Nem
Rhabditidae; Peloderina
NCBI_TaxID=6239;
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Bacteria; Firmicutes; Bacillus/Clostridium
Clostridiales; Clostridiaceae; Clostridium.
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01-MAR-2002 (TrEMBLrel.
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18, Last sequence update)
20, Last annotation updat
m alpha/beta family, YQKD
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4F582109EC03383A
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Hitti J.,
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Lightning J., Lloyd C., McMurray A., Mortimore B., O'Callaghan M.,
Parsons J., Percy C., Rifken L., Roopra A., Saunders D., Shownkeen
Smaldon N., Smith A., Sonnhammer E., Staden R., Sulston J.,
Thierry-Mieg J., Thomas K., Vaudin M., Vaughan K., Waterston R.,
Watson A., Weinstock L., Wilkinson-Sproat J., Wohldman P.;
*2.2 Mb of contiguous nucleotide sequence from chromosome III of C.
elegans.*;
   0956V4;
0956V4;
01-MAY-2000
01-MAY-2000
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Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases
EMBL; U88177; AAB42291.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beck C., Wamsley P.;
"The sequence of C. elegans
Submitted (FEB-1997) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vannuffel P., Heusterspreute M., Bouyer M., Philippe M., Gala J. "Molecular characterization of femA from Staphylococcus hominis, Staphylococcus hamperophyticus and Staphylococcus haemolyticus and based discrimination of staphylococcal species.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF02388; FemAB; SEQUENCE 420 AA; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Res. Microbiol. 0:0-0(1998).
EMBL; AF099962; AAC69631.1; .
InterPro; IPR003447; Meth_resist.
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Bacteria; Firmicutes; Bacillus/Clostridium
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STRAIN-BRISTOL N2;
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EMBL/GenBank/DDBJ databases
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Pred. No. 1.1e+02;
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Search completed: July 11, Job time: 4.18295 secs
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Matches
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Submilted (MAR-1995) to the EMBL/GenBank/DDBJ databases
EMBL; U23711; AAD22132.1; .
InterPro; IPR003447; Meth_resist.
Pfam; PF02388; FemAB; 1.
SEQUENCE 420 AA; 49559 MW; 1C003811D2C59C1E CRC64;
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Bacteria; Firmicutes; Bacillus/Clostridium
Staphylococcus.
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HOSKINS J., Alborn J.r.W.E.,
Skatrud P.L.;
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5; Conser
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llarity 100.0%;
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1.3e+02;
les 0;
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Minimum DB
Maximum DB
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-091-442-9
50
1 AVAMMHQERK 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             July 11, 2003, 11:42:16 ; Search time 5.73805 Seconds (without alignments)
232.223 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    908470 seqs, 133250620 residues
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA198 DAT: *
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA198 DAT: *
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA199 DAT: *
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2000 DAT: *
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2001 DAT: *
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002 DAT: *
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002 DAT: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Geneseq_101002:*
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/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1984.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1987.DAT:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

10	9	8	7	6	ر. د	4	ω	N	_	Result
40	41	41	41	41	44	50	50	50	50	Score
80.0	82.0	82.0	82.0	82.0	88.0	100.0	100.0	100.0	100.0	Query Match
131	380	380	380	380	10	380	380	380	380	Query Match Length DB
23	22	22	21	20	15	22	21	20	15	;
ABP34239	AAB83076	AAG64286	AAB24150	AAY08255	AAR57115	AAB83075	AAB24142	AAY08254	AAR48379	ID
Human glycoprotein	Rat megsin protein	Rat megsin protein	Rat megsin protein	Rat megsin protein	Human megakaryocyt	Human megsin prote	Human megsin prote	Human megsin prote	Human megakaryocyt	Description

45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	Ξ
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	ω ω	33	ω ω	33	33	33	ω ω	ω W	ω W	ω ω	ω ω	34	34	34	34	34	36	37	37	3/
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802	802	798	708	643	581	474	310	299	254	236	235	235	136	65	1232	793	793	793	717	700	700	337	309	253	236	221	83	82	82	67	118	368	368	368
17	13	15	22	22	22	22	22	20	22	20	23	21	23	22	22	20	17	13	22	22	22	20	22	22	20	22	20	21	20	20	22	22	21	20
AAW02283	AAR20744	AAR57283	AAB93073	ABG22551	ABB63013	ABB58359	AAG78270	AAW89198	AAB59372	AAY04700	AAU97023	AA020091	ABB90000	AAG78029	ABB63685	AAY04695	AAW02282	AAR20743	AAM40617	AAM38831	AAM23827	AAY34993	AAG78271	AAB59373	AAY04707	ABG11323	AAW78170	AAB12159	AAY35995	AAY11676	ABG11324	AAB83077	AAB24151	AAY08256
Human receptor typ	Human receptor-typ	Bovine enterokinas			Drosophila melanog	Drosophila melanog		Aspartate-specific	Human protein tyro	Human RPTPa amino	Cattle enteropepti	Protein encoded by	Human polypeptide	Piscirickettsia sa	Drosophila melanog	Mouse receptor-typ	Murine receptor ty	Murine receptor-ty	Human polypeptide	Human polypeptide		Chlamydia pneumoni	Human PTP-epsilon-	Human protein tyro			Human secreted pro	Hydrophobic domain	Extended human sec	Human 5' EST secre	<u>a</u>	Murine megsin prot	Б	Mouse megsin prote

ALIGNMENTS

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RESULT 1
AAR48379
 WPI; 1994-058782/08.
N-PSDB; AAQ56670.
                                                                                                                                                                                                                      Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                                                                                                                                                                                                                                   AAR48379 standard; Protein; 380 AA.
                               Ishida N, Iwasa F, Kurihara T, Miura K, Nakazato H;
Tsujimoto M, Tsuruoka N, Yamaguchi N, Yamaichi K;
                                                                                                17-JUL-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                                  Human megakaryocyte differentiation factor.
                                                                                                                                                                                                                                                                                       16-AUG-1994 (first entry)
                                                                                                                                                                                                                                                                                                              AAR48379;
                                                                                                                                                       23-FEB-1994.
                                                                                                                                                                             EP583884-A.
                                                                                                                                                                                                Homo sapiens.
                                                                (SUNR ) SUNTORY LTD.
(TSUJ/) TSUJIMOTO M.
                                                                                                                                 19-JUL-1993;
                                                                                                92JP-0212305.
93JP-0067339.
                                                                                                                                 93EP-0305654
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RESULT 2
AAY08254
  Best Loc
Matches
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Best Local
                      Query Match
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                                                               This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
                                             Sequence
                                                                                                                                  Claim 1; Page 62-64; 100pp; Japanese.
                                                                                                                                                                              WPI; 1999-276983/23
N-PSDB; AAX56712.
                                                                                                                                                                                                              Miyata T;
                                                                                                                                                                                                                                                                                                              01-APR-1999
                                                                                                                                                                                                                                                                                                                                     WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                   14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55 SDS-PAGE and exhibits an isoelectric point of 6.0-7.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human MDF can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietin making it useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New megakaryocyte differentiation epidermoid carcinoma cells, used t
                                                                                                                                                        Megsin protein expressed specifically in
                                                                                                                                                                                                                                                                    22-SEP-1997;
                                                                                                                                                                                                                                                                                         22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                        Megsin;
                                                                                                                                                                                                                                                                                                                                                                                                               Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY08254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY08254 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                decrease in platelets
                                                                                                                                                                                                                                    (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for treatment of diseases involving a decrease in platelet number
             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  204 AVAMMHQERK 213
                                                                                                                                                                                                                                                                                                                                                                                                              megsin protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7; Page 30-32; 47pp;
  10;
                                                                                                                                                                                                                                                                                                                                                                               rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AVAMMHQERK
             Similarity
                                                                                                                                                                                                                                                                                                                                                                                         mesangial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 100 l0; Conservative
100.
milarity 100.
Conservative
                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      380 AA;
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                                             Ä
                                                                                                                                                                                                                                                                    97JP-0275302
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
            .0%;
                      .08:
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            Score
Pred.
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Pred. No.
Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      factor -
                                                                                                                                                                                                                                                                                                                                                                                        diagnosis;
           No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           actor - isolated from human treat conditions involving
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           .06;
                     DB 20;
                                                                                                                                                        mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 15;
 0
                                                                                                                                                                                                                                                                                                                                                                                       disease;
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                     Length 380;
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 Indels
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                                                                                                                                                                                                                                                                                                                                                                                       IgA nephropathy;
0;
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 Gaps
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 0;
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AAB83075
ID AAB8
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AC AAB8
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                                            RESULT 4
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AAB83075 standard;

Protein;

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RESULT 3
AAB24142
                                                                                                     Query Match
Best Local
                                                                                Matches
                                                                                                                                                                                            The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Megsin; mesanglum-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Page 66-69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Evaluating renal function comprises assaying megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND LTD
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-MAR-2000; 2000WO-JP01646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-SEP-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB24142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB24142 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000-611642/58
  204
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               megsin
                                      1 AVAMMHQERK
                                                                                10;
                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA99294
AVAMMHQERK
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                                                                                                                                                                 380
                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99JP-0075305
99JP-0306623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            213
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213
                                      10
                                                                                                   100.0%;
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                                                                                                     Score 50;
Pred. No.
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                                                                                Mismatches
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RESULT 5
AARS7115
ID AARS
XX
AC AARE
XX
YX
AC AARE
XX
DT 16-4
XX
Hume
XX
Hume
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is human megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useful for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human megsin protein
                                                                                                                                                                                                     Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments \,\cdot\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-300136/31.
N-PSDB; AAF82438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-1999;
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  EP583884-A.
                                                                           Misc-difference
                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                            Human megakaryocyte
                                                                                                                                                                                                                                                                                                                                                               16-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                   AAR57115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR57115 standard; peptide; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-OCT-2000; 2000WO-JP06988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   204 AVAMMHQERK 213
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                                                                           Location/Qualifiers
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                                                   "not determined"
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Pred. No. 0.06;
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RESULT 6
AAY08255
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В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human MDF (see AAR48379) can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoiettin making it useful for treatment of diseases involving a decrease in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55-57kD by SDS-PAGE, exhibits an isoelectric point of 6.0-7.0 and contains an amino acid sequence comprising at least one of the sequences AAR57107-R57115.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SUNR )
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04-MAR-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ishida N, I
Tsujimoto M,
                                                                                                                                                                                                                                                                           01-APR-1999.
                                                                                                                                                                                                                                                                                                                            W09915652-A1.
                                                                                                                                                                                                                                                                                                                                                                           Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                        Megsin; mesangial cell; human; rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rat megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY08255
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New megakaryocyte differentiation factor - isolated from human epidermoid carcinoma cells, used to treat conditions involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1994-058782/08.
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                                                                                              (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                       22-SEP-1997;
                                                                                                                                                                                                                         22-SEP-1998;
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TSUJIMOTO M.
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9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AVAMMHQERK 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
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M, Tsuruoka N, Yamaguchi N, Yamaichi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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93JP-0067339
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     treatment; diagnosis; disease; IgA nephropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB Pred. No. 0.02 0; Mismatches
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0.022;
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maichi K;
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WPI; 1999-276983/23.

Miyata T;

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RESULT 7
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Best Local
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The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles;
                                                                                                                           WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
                                                                                   biological
                                                                                            Evaluating
                                                                                                                                               Miyata
                                                                                                                                                                 (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND LTD.
(MIYA/) MIYATA T.
                                                                                                                                                                                                         19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                             Misc-difference
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                                                               Example
                                                                                                                                                                                                                                        17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                Misc-difference
                                                                                                                                                                                                                                                                               WO200057189-A1
                                                                                                                                                                                                                                                                                                                                                               Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                          Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                          Rat megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB24150,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB24150 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Megsin protein expressed specifically
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                                                                                                                           2000-611642/58
                                                                                                                                                                                                                                                                                                                                                                                 immunoglobulin A; detection; rer
nosis; biological sample; blood;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204
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                                                                                                                                               Τ;
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                                                               <u>ب</u>
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8; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AVNMMHQERR 213
                                                              Page 81-84;
                                                                                  renal function comprises assaying megsin protein sample \ \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                         protein sequence
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                                                                                                                                                                                                                                        2000WO-JP01646
                                                                                                                                                                                                         99JP-0075305
99JP-0306623
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                                                           93pp; Japanese
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                                                                                                                                                                                                                                                                                                                     "unspecified'
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3.8;
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AAG64286
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                             Query Match
Best Local :
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Best Local
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                                                                                                    Sequence
                                                                                                                                                    present invention. Mes and its level is eleva the serum or urine lev this type of disorder.
                                                                                                                                                                         The present invention relates to a novel antibody which recognises peptide consisting of residues 341-354 of rat megsin protein. The peptide consisting of residues for rat megsin, which was used in sequence is the protein sequence for rat megsin, which was used in present invention. Mesgin is highly expressed in renal mesangial or and its level is elevated in mesangium proliferative nephritis. Assuthe serum or urine level using the antibody is therefore indicative
                                                                                                                                                                                                                                                                                                                                                             Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                           New antibody recognizing a partial sequence diagnosis of mesangium proliferative nephrit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-425651/45
N-PSDB; AAH48181.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-DEC-1999;
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Similarity
8; Conserv
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80.0%;
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                                                                                                                                                                                                                                                                                                                                                        63pp;
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                       Score 41;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cell; mesangium proliferative nephritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 41;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                        Japanese.
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3.8;
                       3.8
3.8
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                                                                                                                                                                                                                                                                                                                                                                                                                                     rat
                                                  Length 380;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                     protein
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RESULT 10
ABP34239
ID ABP34439
XX ABP34
XX ABP34
XX O8-JU
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XX Humar
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Best Local :
disease monitoring; cytokine; cell proliferation; cell differentiation; immune modulation; haematopoiesis regulation; tissue growth; anglogenesis; activin; inhibit; chemotactic; chemokinetic; haemostatic; thrombolytic; tumour inhibition; bodily characteristic; fertility; behaviour; cancer; proliferative disorder; neurological disorder; cardiovascular disease; immune system disorder:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is rat megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal model c mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is used for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-300136/31.
N-PSDB; AAF82439.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-OCT-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transgenic mouse; glomerular disease; animal model; drug screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rat; megsin; mesangial cell proliferative nephritis; nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rat megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB83076;
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                                                                                                                                                                                                                                Human glycoprotein-like ORF3212
                                                                                                                                                                                                                                                                                           08-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse model for mesangial cell proliferative nephritis for development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-APR-2001.
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                                                                                                                                                                                                                                                                                                                                                                                               ABP34239 standard; Protein; 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MIYA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (KURO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
les 8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        screening of new treatments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204
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MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVNMMHQERR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AVAMMHQERK 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page 48-50; 62pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       213
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 41; [
Pred. No. 3
                                                                                                                                                                                                                                   protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.8;
                                                                                                                                                                                                                                      SEQ
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                                                                                                                                                                                                                                      ID NO:6424
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           얁
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CC and antiinfective activity, and may also be involved in the determination CC of bodily characteristics, fertility and behaviour. ORFX proteins, CC nucleic acids and antibodies may be used in the treatment of cancers, CC other proliferative disorders such as psorlasis and benign tumours, CC neurological disorders such as epilepsy and Alzheimer's disease, CC cardiovascular diseases, immune system disorders, disorders related to CC cardiovascular diseases, immune system disorders, disorders related to CC cardiovascular diseases, indincaton and ciscovery and cholesterol ester CC diseases such as diabetes mellitus, hypothyroidism, and cholesterol ester CC storage disease, and infectious diseases caused by viral, bacterial, CC fingal and other pathogens. ORFX nucleic acids may also be used as a CC source of primers and probes, in the detection of ORFX genomic sequences CC or transcripts, in the identification and cloning of homologous CC sequences, in genetic diagnosis, and in forensic biology. The ORFX CC nucleic acids may also be useful for studying the function and/or activity of ORFX CC which may be useful for studying the function and/or activity of ORFX CC diagnosis, treatment and monitoring of ORFX-associated diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              designated ORF (open reading frame) 1-4534, and sequences ABN75054-
ABN79587 represent cDNAs encoding them. The invention also encompasses
polypeptides at least 80% identical to the ORF1-ORF4534 (collectively
referred to as ORFX) proteins, polynucleotides at least 85% identical to
the ORFX nucleic acid sequences, vectors and host cells comprising ORFX
polynucleotides, the recombinant production of ORFX proteins, antibodies
specific for ORFX proteins, methods of detecting ORFX polynucleotides and
polypeptides, methods of screening for modulators of ORFX expression or
cactivity, and methods of screening individuals for a predisposition to an
ORFX-associated disorder. The ORFX proteins of the invention have a wide
crange of biological activities, such as cytokine, cell proliferation,
tissue growth, angiogenesis, activin or inhibit activity, chemotactic/
chemokinetic activity, haemostatic activity, thrombolytic activity,
receptor/ligand, antinflammatory activity, thrombolytic activity,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vasotropic; antipsoriatic; antidiabetic; cytostatic; nootropic;
neuroprotective; antiatherosclerotic; anticoagulant; thrombolytic;
cardiant; hypotensive; antithyroid; antiinflammatory; immunomodula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tissue growth disorder; tissue regeneration disorder; diabete: hypothyroidism; cholesterol ester storage disease; infection; vasotropic; antipsoriatic; antidiabetic; cytostatic; nootropic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 10; Page 1854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and disorders related to organ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; ABN78265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200190366-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               dermatological;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002-106200/14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               analgesic; virucide; antibacterial; fungicide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2508pp;
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Sequence

131

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RESULT 12
AAB24151
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AAY08256
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Best Local
                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
Protein
diagnosis; biological sample; blood; urine.
         Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder;
                                                          30-JAN-2001
                                                                              AAB24151;
                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                        This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial
                                                                                                                                                                                                                                                                                                          Claim 1; Page 76-79; 100pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                               Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY08256 standard; Protein;
                                      Mouse megsin protein sequence
                                                                                                 AAB24151 standard;
                                                                                                                                                                                                                                                                                                                             Megsin protein expressed specifically in mesangial cells
                                                                                                                                                                                                                                                                                                                                                   N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                              22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Megsin; mesangial cell; treatment; diagnosis; disease; IgA nephropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY08256;
                                                                                                                                                                                                                                                                                                                                                                                                  (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; rat; murine.
                                                                                                                                                                                                                                                                                                                                                  1999-276983/23.
DB; AAX56714.
                                                                                                                                                  193
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                                                                                                                                                                                                                                                 such as IgA nephropathy.
                                                                                                                                                            2 VAMMHQERK 10
                                                                                                                                                                                                  Similarity
                                                                                                                                                 VNMMHQERR 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||||||||
| AVAMMHQSR 98
                                                                                                                                                                                                                                368 AA;
                                                                                                                                                                                        Conservative
                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1..368
                                                                                                 Protein;
                                                         entry)
                                                                                                                                                                                                 74.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "partial sequence"
                                                                                                  368
                                                                                                                                                                                        1;
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                                                                                                                                                                                                  Pred.
                                                                                                                                                                                                          Score 37;
                                      SEQ ID NO:21.
                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                 No.
                                                                                                                                                                                                  DB
23;
                                                                                                                                                                                                          20;
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                                                                                                                                                                                                          Length 368;
                                                                                                                                                                                       Indels
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RESULT 13
AAB83077
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Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the mouse megsin protein, which is given in the exemplification of the present invention.
                                                06-OCT-1999;
                                                                                                06-OCT-2000; 2000WO-JP06988
                                                                                                                                                                                                       WO200124628-A1
                                                                                                                                                                                                                                                          Mus musculus
                                                                                                                                                                                                                                                                                                          Mouse; megsin; me
transgenic mouse;
                                                                                                                                                                                                                                                                                                                                                                                     Murine megsin protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB83077;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB83077 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-611642/58
N-PSDB; AAC55239.
                                                                                                                                                      12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                         10-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Evaluating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (KURO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-MAR-2000; 2000WO-JP01646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-SEP-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MIYA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193 VNMMHQERR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ) KUROKAWA K.
) FUSO PHARM :
) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 VAMMHQERK 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           renal function comprises assaying megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 89-91;
                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                99JP-0285736
                                                                                                                                                                                                                                                                                                                                     mesangial cell proliferative nephritis; nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99JP-0075305
99JP-0306623
                                                                                                                                                                                                                                                                                                          glomerular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protein; 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 37; DB
Pred. No. 23;
1; Mismatches
                                                                                                                                                                                                                                                                                                                disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA
                                                                                                                                                                                                                                                                                                                animal model;
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23;
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(KURO/) KUROKAWA K.

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RESULT 14
ABG11324
ID ABG11
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AC ABG11
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DT 18-F
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NOVE
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NOVE
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KW HOOM
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PD 11-
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PF 30
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PR 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is murine megsin protein. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useful for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments \cdot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB;
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                                                                                                                          New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABG11324;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes.
                                                                               Claim 20;
                                                                                                                                                                                                                                                             N-PSDB;
                                                                                                                                                                                                                                                                                                                                          Drmanac
                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAR-2000;
23-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel human diagnostic protein #11315
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                                                                                                                                                                                                                                                                                                                                                                                          (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200175067-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tecor
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DB; AAF82440.
                                                                                                                                                                                                                                                             2001-639362/73.
DB; AAS75511.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            supplement;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chromosome mapping; gene mapping; gene therapy; forensic;
upplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N
                                                                                                                                                                                                                                                                                                                                       RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity 77.8
7; Conservative
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                                                                             SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368
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                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0540217.
2000US-0649167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US08631
                                                                                                                                                                                                                                                                                                                                     Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                          ID No 41683; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3
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77.8%;
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                                                                                                                                                                                                                                                                                                                                       ΥT
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Pred.
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. No.
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23;
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RESULT 15
AAY11676
ID AAY11
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polynucleotifes are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical changing of sites expressing (II). (I) and (II) are useful for treating imaging of sites expressing (II). (I) and (II) are useful for treating CC disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in CC diagnostics, forensics, gene mapping, identification of mutations are responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and and active to the invention.

CC and to produce other types of data and products dependent on DNA and content the sequences. ABG00010-ABG30377 represent novel human cold diagnostic amino acid sequences of the invention.

CC sepecification, but was obtained in electronic format directly from WIPO case of the products of the printed directly from WIPO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY11676 standard; Protein; 67
                                                                          New nucleic acids encoding human secreted proteins - obtained from cDNA libraries derived from liver, lung, large intestine, colon, thyroid and pancreas tissue
                                                                                                                                                                                                                                                                 01-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY11676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
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                                                                                                                                              WPT; 1999-153700/13.
N-PSDB; AAX40394.
                                                                                                                                                                                                                                                                                                  31-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human 5′
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-JUN-1999
                                                                                                                                                                                                                                (GEST ) GENSET.
                                                                                                                                                                                                                                                                                                                                                                    WO9906439-A2
                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene mapping, and in recombinant production of (II).
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5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
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                                                                                                                                                                                                                                                                                                  98WO-IB01233
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50.0%;
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                                                                                                                                                                                                 Lacroix
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AAX40251 to AAX40397 represent 5' expressed sequence tags human secreted proteins, and encode the proteins given in

(ESTS) for AAY11533 to

Claim 27; Page 395-396; 398pp; English

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Search completed: July 11, 2003, 11:54:26 Job time: 6.73805 secs
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                                                                                                                                                                                                                                                                                                          CC AAY11679, respectively. The proteins given represent the signal peptide CC and an N-terminal fragment of a secreted protein. The nucleic acid CC sequences can be used for producing secreted human gene products. They CC can also be used to develop products for diagnosis and therapy. The CC proteins obtained may have cytokine activity, cell proliferation/differentiation activity, neproductive hormone CC regulating activity, chemotactic/ chemokinetic activity, haemostatic and CC thrombolytic activity, receptor/ ligand activity, anti-inflammatory CC activity, tumour inhibition activity or other activities. The products CC The sequences can also be used for obtaining corresponding promoter CC sequences. The nucleic acids encoding the signal peptide can be used for CC directing extracellular secretion of a polypeptide or the insertion of a CC polypeptide into a membrane, or importing a polypeptide into a cell.
                                                                                                                                                                             Query Match 68.0%;
Best Local Similarity 55.6%;
Matches 5; Conservative
                                                                                                                                                                                                                                                                           Sequence
                                                                                         1 AVAMMHQER 9
|:|::|:|
18 AIAVLHEER 26
                                                                                                                                                                                                                                                                           67 AA;
                                                                                                                                                                                                       Score 34; DB 20; Length 67; Pred. No. 16;
                                                                                                                                                                                  Mismatches
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Maximum DB
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Perfect score:
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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164.563 Million cell updates/sec
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US-08-611-977-9
US-08-472-659-34
US-08-474-661-34
US-08-474-651-9
US-08-474-651-9
US-08-685-992-10
US-08-685-992-10
US-08-015-985-3
US-08-287-959-14
US-08-015-985-6
US-08-015-985-6
US-08-015-985-6
US-08-015-985-6
US-08-015-985-1
US-08-287-25-9
US-08-287-25-1
US-08-287-25-1
US-08-287-25-1
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US-09-196-387-2
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ALIGNMENTS

US-08-611-977-9 US-08-611-977-9 US-08-611-977-9 IS SEQUENCE 9, APPLICATION US/08611977 PATENT NO. 5972886 GENERAL INFORMATION: APPLICANT: TSUJINOTO, Masafumi APPLICANT: TSUJINOTO, Masafumi APPLICANT: TSUJINOTO, Masafumi APPLICANT: TSUROUGKA, NO. 5972886uni APPLICANT: SURACATO, Hiroshi APPLICANT: SURACATO, Hiroshi APPLICANT: WIGHIARA, Kenju APPLICANT: TSUROUGKA, NO. 5972886uni APPLICANT: TSUROUGKA, NO. 5972886uni APPLICANT: TSUROUGKA, NO. 5972886uni APPLICANT: TSURACUGHI, NO. 5972886uni APPLICANT: TSURACUGHI, NO. 5972886uni TITLE OF INVENTION. MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 3 APPLICANT: Alexandria STRATET: P. D. BOX 1404 CITY: Alexandria STRATET: P. D. BOX 1404 CITY: Alexandria STRATET: P. D. BOX 1404 COMPUTER: BUITS, DOANE, SWECKER & MATHIS STRATET: P. D. BOX 1404 COMPUTER: READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: TSUBLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: TAPPLICATION DATA: APPLICATION NUMBER: US 08/091,028 FILING DATE: 06-MAR-1996 CLASSIFICATION DATA: APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993 PRIOR APPLICATION DATA: APPLICATION NUMBER: JP 4-212305 FILING DATE: 14-JUL-1993 PRIOR APPLICATION DATA: APPLICATION NUMBER: JP 6-067339 FILING DATE: 14-JUL-1993 PRIOR APPLICATION DATA: APPLICATION NUMBER: JP 6-07339 FILING DATE: 17-JUL-1992 PRIOR APPLICATION NUMBER: 39-300 REFERENCE/DOCKET NUMBER: 39-300 FELECOMMUNICATION INFORMATION: TELEPON: (703) 836-6620 INFORMATION FOR SEQ LD NO: 9: SEQUENCE CHARACTERISTICS:
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                                 ; MOLECULE TYPE: US-08-472-659-34
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 Query Match
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                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/472,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                               REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 536 PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
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                                                        TOPOLOGY: linear
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                                                                                                                                                                                                                REGISTRATION NUMBER:
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Alexandria
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NAKAZATO, Hiroshi
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YAMAGUCHI, NO. 5831030cmi
ENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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14-JUL-1993
                                               protein
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DB 2;
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Length 380;
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                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 17-JUL-
PRIOR APPLICATION DATA:
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                                                                                                                                         MOLECULE TYPE:
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                                                                                                                                                                                    LENGTH: 380 amino acids
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APPLICATION NUMBER: JP 4-212305
APPLICATION 11-JUL-1992
                                                                                                                                                       TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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204 AVAMMHQERK 213
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                                                                            Similarity
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                                                                                                                                                                  amino acid
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YAMAICHI, Kozo
YAMAGUCHI, No. 5874253omi
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NAKAZATO, Hiroshi
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                                                                            Score 50; DB 2; Pred. No. 0.013;
                                                            Mismatches
                                                                                         DB 2;
                                                                                         Length 380;
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                                                            Indels
                                                            0;
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                                                              Gaps
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RESULT 4

APPLICANT:

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RESULT 5
US-08-472-659-9
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                                                                                                                                                                                                                                                                                                                    ; MOLECULE TYPE: protein US-08-611-977-34
                                                               Sequence 9, Application US/08472659 Patent No. 5831030 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                APPLICANT: APPLICANT:
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FILING DATE: 06-MAR-1
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 04-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 17-JUI
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CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-204
                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
                                                                                                                                                                                 204 AVAMMHQERK 213
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                                                                                                                                                                                                                                           ch 100.0%;
1 Similarity 100.0%;
10; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/08611977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Burns, Doane, Swecker & Mathis P.O. Box 1404
TSUJIMOTO, Masafumi
IWASA, Fuyuki
TSUROUOKA, No. 5831030uo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TSUROUOKA, No. 5972886uo NAKAZATO, Hiroshi
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AMAGUCHI, NO. 5972886omi
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17-JUL-1992
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                                                                                                                                                                                                                                                                Score 50; DB 2;
Pred. No. 0.013;
                                                                                                                                                                                                                                                                               DB 2; Length 380;
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                                                                                                                                                                                             Patent No. 5874253 GENERAL INFORMATION:
                                                                                                                                                                                                     Sequence 9, Apr. 5874253
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                                                                                                                                                                                                                                                                                                                                                                              Matches
APPLICANT: YALL MAPPLICANT: YALL OF INVENTION: M
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TELEFAX: (703) 836-20
INFORMATION FOR SEQ ID NO:
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REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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FILING DATE: 14-JUL-1993
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: sir
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                                                                                                                                                                                                                                                                                                                                            1 AVAMMHQERK 10
                                                                                                                                                                                                                                                                                                                                                                          88.0%;
Similarity 90.0%;
9; Conservation
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AVAMMHQXRK 10
                                                                                                                                                                                                                           Application US/08474661
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P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 amino acids
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YAMAICHI, KOZO
YAMAGUCHI, No. 5831030omi
             MIURA, Kenju
ISHIDA, NO. 5874253uhiro
KURIHARA, Tatsuya
YAMAICHI, Kozo
YAMAGUCHI, Kozo
YAMAGUCHI, NO. 5874253omi
YAMAGUCHI, NO. 5874253omi
EQUENCES: 34
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ISHIDA, No. 5831030uhiro
                                                                                                                            TSURUOKA, No. 5874253uo
NAKAZATO, Hiroshi
                                                                                                                                                            IWASA, Fuyuki
                                                                                                                                                                            TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
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                                                                                                                                                                                                                                                                                                                                                                            Score 44; DB 2;
Pred. No. 0.0046;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                             DB 2; Length 10;
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US-08-685-992-10
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                                                                                                                                                                                                                                                                                                  Sequence 10, Applicat Patent No. 5912138
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
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INFORMATION FOR SEQ ID NO:
                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
APPLICATION NUMBER: US 1993
APPLICATION NUMBER: UP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                     TITLE OF INVENTION: SUBSTRATE TRAPPING PROTEIN TITLE OF INVENTION: TYROSINE PHOSPHATASES NUMBER OF SEQUENCES: 36
                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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                               SOFTWARE:
                                             COMPUTER: IBM Compatible OPERATING SYSTEM: Windows
                                                                                                             COUNTRY: UZIP: 02173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
    APPLICATION
                                                                                                                                                                          STREET:
                                                                                                                                                                            ADDRESSEE: HAMILTON, BROOK STREET: Two Militia Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/01
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
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OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: Alexandria
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                  APPLICATION DATA:
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                                                                                                                                                          Lexington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : 10 amino acids
amino acid
                                                                                                                                             ΜA
                                                                                                                                                                                                                                                                                                                                    Application US/08685992
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                                                                                                                              USA
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                             FastSEQ for Windows Version
                                                                                                                                                                                                                                                                        Flint, Andrew J
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                                               Windows 95
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US/08/685,992
                                                                                                                                                                                         BROOK, SMITH & REYNOLDS, P.C
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Best Local Similarity 66.2
Matches 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10
                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/685
APPLICATION NUMBER: 1996
FILING DATE: July 25, 1996
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                        SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: 781-861-6240
                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: CS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 781-861-6240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 25-JUL-1
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tonks, APPLICANT: Flint,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
                                                                         TELEPHONE: 781-861-9540
                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: Windows yo
SOFTWARE: FastSEQ for Windows Version 2.0b
STRANDEDNESS:
                         LENGTH:
                                                                                                                     REFERENCE/DOCKET NUMBER: CSI
                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                  COMPUTER:
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               amino acid
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                       253 amino acids
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single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBSTRATE TRAPPING PROTEIN TYROSINE PHOSPHATASES
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66.7%;
                                                                                                                                                                                                            08/685,992
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Pred. No.
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RESULT 9
US-08-015-985-3
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US-08-015-985-3
                                                                                                      US-08-287-959-14
                                                         Sequence 14, Application US/08287959 Patent No. 5639651 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3,
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Best Local
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IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/015 or
FILING DATE: 10-FFB-17
                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 793 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                             NAME: COTUZZI, LBUTB A. REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 766 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 10-FEB-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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APPLICANT: Sap, Jan M.
TITLE OF INVENTION: NO
TITLE OF INVENTION: PI
                  APPLICANT:
                                             APPLICANT:
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Local Similarity 66.7%;
les 6; Conservativo
                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
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   TLE OF INVENTION:
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es 6; Conserv
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                                                                                                                                                              452 MMHSERK 458
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1155 AVENUE OF THE AMERICAS
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Weissbach, Lawrence
Bernards, Andre
Settleman, Jeffrey
VENTION: GAP-RELATED GENE
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85.7%;
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                                                                                                                                                                                                                                    Score 33;
Pred. No.
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Pred. No. 23;
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US-08-807-151-3
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SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TYPE: amino acid
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Best Local
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COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/807,1:
FILING DATE: Filed Herewith
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (617) 542-5070
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NAME: Clark, Paul C.
REGISTRATION NUMBER: 30,162
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                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: E
                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NOVEL HUITILE OF INVENTION: PROTEASE
                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bandman, Olga APPLICANT: Lal, Preeti
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TELLEFAX: 200154
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ZIP: 02110
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ZIP: 94304
                                                                                                                                                                                                                            CITY: Palo Alto
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3174 Porter Drive
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IBM Compatible
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                                                                     US/08/807,151
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9, 1994
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Pred. No.
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ATTORNEY/AGENT INFORMATION: NAME: Billings, Lucy J.

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US-09-478-957-3
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 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Bandman, Ol
APPLICANT: Lal, Preeti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                        TELEFAX: 415-845-4166 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                       FILING DAIL:
ATTORNEY/ACENT INFORMATION:
NAME: Billings, Lucy J.
NAME: Billings, 56,749
                                          IMMEDIATE SOURCE:
LIBRARY: GenBa
CLONE: 416132
                                                                                                                                          SEQUENCE CHARACTERISTICS:
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LIBRARY: GenBank
CLONE: 416132
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                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 31, CITY: Palo Alto
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE:
                                                                                                STRANDEDNESS:
                                                                                                                                                                                   TELEPHONE:
                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
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Local Similarity 66.7%;
es 6; Conservation
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STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER:
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                                                                                                                             ENGTH:
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                                                                                                             amino acid
                                                                                                                            235 amino acids
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3174 Porter Drive
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                                                         GenBank
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                                                                                linear
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 64.0%;
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 Score 32;
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Pred. No.
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DB 4;
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 Length 235
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                                                                                                                                                                                      RESULT 14
                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-08-015-985-6
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US-08-015-985-6
                                                                                                                                       Sequence 9, Application US/08685992 Patent No. 5912138
                                                                                                                                                                                                                                                                                                   Matches
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Best Local
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Patent No. 5538886
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Matches 6; Conserv
                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (212)
TELEX: 66141 PE
INFORMATION FOR SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/
FILING DATE: 10-FEB-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
        NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 761
TELECOMMUNICATION INFORMATION:
                                                          APPLICANT: Tonks, Nicholas APPLICANT: Flint, Andrew J. TITLE OF INVENTION: SUBSTRATITLE OF INVENTION: TYROSIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Sap, Jan M
TITLE OF INVENTION: NO
TITLE OF INVENTION: PI
                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
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                                                                                                                                                                                                                                   197 MMHTERK 203
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Two Militia Drive
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (212) 790-9090
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ID NO:
                                                          TYROSINE PHOSPHATASES
                                                                                                                                                                                                                                                                                                              64.0%;
85.7%;
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                                                                         SUBSTRATE TRAPPING PROTEIN
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Pred. No.
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33;
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CITY: Lexington

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US-09-144-925-9
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COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/144,925
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/685,992
FILING DATE: July 25, 1996
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 9, Application US/09144925 Patent No. 5951979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local Similarity 85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Tonks, Nicholas
APPLICANT: Flint, Andrew J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: CSHL
TELECOMMUNICATION INFORMATION:
TELEPHONE: 781,861-6240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08,
EILING DATE: 25-UU-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
VOLFORTY
                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 02421-4799
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: Fast-SEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
STREET: Two Militia Drive
                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: SUBSTRATE TRAPPING PROTEIN TITLE OF INVENTION: TYROSINE PHOSPHATASES NUMBER OF SEQUENCES: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                          STREET: Two Milli
CITY: Lexington
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: US
ZIP: 02173
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                206 MMHTERK 212
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; TOPOLOGY: linear; MOLECULE TYPE: peptide US-09-144-925-9
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Search completed: July 11, 2003, 12:02:12 Job time: 2.78794 secs
                                                                                                                       Query Match
Best Local Similarity 85.7
Matches 6; Conservative
                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: CSHL96-03Z
TELECOMMUNICATION INFORMATION:
TELEPHONE: 781-861-6240
                                                                                                                                                                                                                                                                                                                            TELEPHONE: 781-861-62
TELEFAX: 781-861-9540
                                                                                                                                                                                                                               STRANDEDNESS:
                                                              206 MMHTERK 212
                                                                                           4 MMHQERK 10
                                                                                                                                                                                                                                                 amino acid
                                                                                                                                                                                                                                 single
                                                                                                                                       64.0%;
85.7%;
                                                                                                                                                                                                                                                                                               9:
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                                                                                                                                       Score 32; DB
Pred. No. 36;
                                                                                                                         Mismatches
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Result
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Maximum DB
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Perfect score:
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length: 2000000000
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50
1 AVAMMHQERK 10
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Match
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397.148 Million cell updates/sec
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Maximum Match 100%
Listing first 45 summaries
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: /cgn2_6/ptodata/1/pubpaa/JS07_NEW_PUB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS06_NEW_PUB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS06_NEW_PUB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS06_PUBCOMB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS08_NEW_PUB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS08_NEW_PUB.pep: *
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: /cgn2_6/ptodata/1/pubpaa/JS10_PUBCOMB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS10_PUBCOMB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS10_PUBCOMB.pep: *
: /cgn2_6/ptodata/1/pubpaa/JS10_NEW_PUB.pep: *
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Copyright (c) 1993 - 2003 Compus
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9
                10 US-99-140-719-9

US-10-1091-442-34

10 US-99-7140-719-34

10 US-99-788-626-11

10 US-99-788-626-12

10 US-99-788-626-12

10 US-99-788-626-10

10 US-99-919-497-91

10 US-99-919-497-92

10 US-10-128-714-8591

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              Sequence 9, Appli
Sequence 34, Appl
Sequence 34, Appl
Sequence 6, Appli
Sequence 10, Appl
Sequence 10, Appl
Sequence 92, Appl
Sequence 93, Appl
Sequence 8591, Appl
Sequence 8591, Appl
Sequence 8, Appli
Sequence 8, Appli
Sequence 10, Appli
Sequence 10, Appli
Sequence 10, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
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US-10-091-442-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:

COMPUTER TO THE TO 
                                                                                                                                                                                                                                                                                                                                                                                                                               MIURA, Kenju
ISHIDA, NO. US20020164711A1uhiro
KURIHARA, Tatsuya
YAMAIHI, Kozo
YAMAGUCHI, Kozo
YAMAGUCHI, NO. US20020164711A1omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker & Mathis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-UN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-UL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-UL-1993
APPLICATION NUMBER: JP 6-067339
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STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: P.O. Box 1404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TSUROUOKA, No. US20020164711Aluo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WASA, Fuyuk
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US-09-867-550-888
US-10-156-761-8516
US-99-765-272-196
US-99-765-2761-12080
US-09-925-299-934
US-09-925-299-934
US-09-925-299-934
US-09-925-299-934
US-09-815-242-13443
US-09-815-242-13640
US-09-815-242-13640
US-09-815-242-13640
US-09-815-242-13640
US-10-163-866-42
US-10-163-866-42
US-10-1163-866-42
US-10-101-464A-74
US-10-101-2866-210463
US-10-101-2866-210463
US-10-101-2866-210463
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US-09-934-070-8
US-10-157-031-267
US-09-776-191-64
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US-09-910-430-27
US-08-808-031A-40
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                                                                                                                                                                                                                                                        Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 27, Appl
Sequence 40, Appl
Sequence 64, Appl
Sequence 8516, Ap
Sequence 12080, App
Sequence 12080, Ap
Sequence 934, App
Sequence 934, App
Sequence 934, App
Sequence 934, App
Sequence 13443, Ap
Sequence 13443, Ap
Sequence 13443, A
Sequence 11759, A
Sequence 41, Appl
Sequence 21, Appl
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Best Local (
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   PRIOR APPLICATION DATA:

PRIOR APPLICATION NUMBER: JP 6-
APPLICATION NUMBER: JP 6-
APPLICATION NUMBER: JP 6-
                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                        SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 34
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                            FILING DATE: 14-JUL-1993
                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 001560-247 TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                        RY: United States 22313-1404
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STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                          P.O.
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YAMAGUCHI, No. US20010026931Alomi
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                                                                                                                                                                                                                                                                         PatentIn Release #1.0, Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Burns, Doane, Swecker & Mathis
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                                                                                                                                                                                                                        UMBER: US/09/140,719
08-AUG-1998
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703) 836-2021
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100.0%;
                                                                                                                           US 08/091,028
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                              JP 6-067339
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Pred. No. 0.00028;
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          stent No. US20020164711A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 00 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide
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                            REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YAMAGUCHI, NO. US20020164711A10mi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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10; Conserv
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                                                                                                                                                                                                                                                                                                                CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/474,661 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Burns, Doa
STREET: P.O. Box 1404
                TELEPHONE:
                                                                                 NAME: McGowan, Malcolm K.
                                                                                                                   APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                               FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/140,719
                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: United States
                                                                                                                                                        APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
                                                                                                                                                                                       APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
ELEFAX: (703)
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ISHIDA, No. US20020164711Aluhiro
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NAKAZATO, Hiroshi
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Pred. No. 0.00028;
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TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 34:
US-10-091-442-34
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US-09-140-719-34
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Patent No. U
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APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION: APPLICANT: TSUJIM
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SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                               NAME: MCGOWAD, MAICOIM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                            APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                       PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: United States
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                                   TELEPHONE:
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US20010026931A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: Burns, Doane, Swecker & Mathis
P.O. Box 1404
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YAMAGUCHI, No. US20010026931Alomi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IWASA, Fuyuki
TSUROUOKA, No. US20010026931Aluo
NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SHIDA, No. US20010026931Aluhiro
                                     (703) 836-6620
                                                                                                                                                  UMBER: JP 6-067339
04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                   08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEGAKARYOCYTE DIFFERENTIATION FACTOR
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Pred. No. 0.0
); Mismatches
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; TYPE: PRT
; ORGANISM: Homo sapiens
; PUBLICATION INFORMATION:
; DATABASE ACCESSION NUMBER: Genbank ID No. US20020119531A1 g416132
US-09-988-975A-6
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-788-626-11
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US-09-988-975A-6
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APPLICANT: Bandman, Olga
APPLICANT: Lal, Preeti G.
APPLICANT: Lal, Preeti G.
TITLE OF INVENTION: PROSTATE-ASSOCIATED PROTEASE ANTIBODY
FILE REFERENCE: PF-0227-2 CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/788,626
CURRENT FILING DATE: 2001-02-13
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID: NO 11
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Best Local Similarity 100
Matches 10; Conservative
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                                                                         Query Match
Best Local
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                                                           Matches
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                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 8
SOFTWARE: PERL Program
                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/988,975A CURRENT FILING DATE: 2001-11-19
                                                                                                                                                                                                  LENGTH: 235
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                                                         Similarity 66. 6; Conservative
IAMMHLEMK 101
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                                                         Score 32; DB Pred. No. 60; 1; Mismatches
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Pred. No. 51;
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Pred. No. 0.019;
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                                                                                      Length 235;
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RESULT 7

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                                                                                                                                           RESULT 9
US-09-919-497-91
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SOFTWARE: FastSEQ for
SEQ ID NO 10
LENGTH: 310
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SEQ ID NO 15
LENGTH: 279
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                       GENERAL INFORMATION:
                                                                                                        Sequence 91, Application US/09919497 Patent No. US20020106662A1
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APPLICANT: MUTTER, GEORGE L.
TITLE OF INVENTION: PROGNOSTIC CLASSIFICATION OF ENDOMETRIAL CANCER
FILE REFERENCE: BO801/725
CURRENT APPLICATION NUMBER: US/09/919,497
CURRENT FILING DATE: 2001-07-31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2001-02-13
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PRIOR TILING DATE: 1999-09-23
PRIOR APPLICATION NUMBER: 60/101,867
PRIOR FILING DATE: 1998-09-25
NUMBER OF SEQ ID NOS: 21
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APPLICANT: Jokhadze, George
TITLE OF INVENTION: Metal Ion Affinity Tags and Methods for
TITLE OF INVENTION: Using the Same
FILE REFERENCE: CLON056CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Flint, Andrew J. APPLICANT: Cool, Deborah I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/858,332
CURRENT FILING DATE: 2002-07-02
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66.7%;
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85.7%;
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Pred. No.
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RESULT 11
US-10-128-714-8591
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US-09-919-497-92
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SEQ ID NO 91
LENGTH: 31
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                                                                                                                                                                                                                                                                                                                                                                  Sequence 8591, Application US/10128714 Publication No. US20030119013A1
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Best Local
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APPLICANT: Eroshkin, Alexey M
APPLICANT: Lemieux, Sebastien M
TITLE OF INVENTION: Identification of Essential Genes in Aspergillus fumigatus and
TITLE OF INVENTION: Methods of Use
FILE REFERENCE: 10182-018-999
               PRIOR APPLICATION NUMBER: US 60/285,697
PRIOR FILING DATE: 2001-04-23
PRIOR APPLICATION NUMBER: US 60/287,066
PRIOR FILING DATE: 2001-04-27
PRIOR APPLICATION NUMBER: US 60/295,890
PRIOR FILING DATE: 2001-06-05
PRIOR FILING DATE: 2001-06-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Mutter, George L.
TITLE OF INVENTION: PROCNOSTIC CLASSIFICATION OF ENDOMETRIAL CANCER
FILE REFERENCE: BOBOL/7225
CURRENT APPLICATION NUMBER: US/09/919,497
CURRENT FILING DATE: 2001-07-31
                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/128,714
CURRENT FILING DATE: 2002-04-23
                                                                                                                                                                                                                                                                                                                            APPLICANT: Jiang, Bo
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APPLICATION NUMBER: US 60/303,899
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5; Conserv
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                                                                                                                                                                                                                                                                                        Tishkoff, Daniel
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62.5%;
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Pred. No.
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Pred. No.
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APPLICANT: Eroshkin, Alexey M
APPLICANT: Lemieux, Sebastien M
TITLE OF INVENTION: Identification of Essential Genes in Aspergillus fumigatus and
TITLE OF INVENTION: Methods of Use
FILE REFERENCE: 10182-018-999
CURRENT APPLICATION NUMBER: US/10/128,714
CURRENT FILING DATE: 2002-04-23
PRIOR APPLICATION NUMBER: US 60/285,697
PRIOR FILING DATE: 2001-04-23
PRIOR FILING DATE: 2001-04-27
PRIOR APPLICATION NUMBER: US 60/287,066
PRIOR APPLICATION NUMBER: US 60/295,890
PRIOR APPLICATION NUMBER: US 60/295,890
PRIOR APPLICATION NUMBER: US 60/303,899
PRIOR FILING DATE: 2001-06-05
PRIOR FILING DATE: 2001-08-05
PRIOR FILING DATE: 2001-08-03
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US-09-841-835-8
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                                                                                                    Sequence 8, Application US/09841835
Patent No. US20020076795A1
GENERAL INFORMATION:
APPLICANT: de Lange, Titia
APPLICANT: Smith, Susan
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NUMBER OF SEQ ID NOS: 8603
SOFTWARE: PatentIn version 3.1
SEQ ID NO 8591
LENGTH: 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn version 3.1 SEQ ID NO 3591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3591, Application US/10128714 Publication No. US20030119013A1
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                                                              TITLE OF INVENTION: A PROTEIN THAT BINDS TO TRF1 AND METHODS TITLE OF INVENTION: OF USE THEREOF
                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 75.
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Tishkoff, Daniel
Zamudio, Carlos
Klauber & Jackson
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75.0%;
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Pred. No. 2e+0
1; Mismatches
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Pred. No. 1.6e+02;
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US-09-815-242-10901
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                             FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT TILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR APPLICATION NUMBER: 60/291,078
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/243,625
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR APPLICATION NUMBER: 60/257,931
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                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Identification of Essential Genes TITLE OF INVENTION: Prokaryotes
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LENGTH: 673 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 201-487-5800 TELEFAX: 201-343-1684
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APPLICATION NUMBER:
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CTTY: Hackensack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-230 CIP1
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Xu, H. Howard
                                                                                                                                                                                                                                                                                                                                                                                                             Carr, Grant J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wall, Daniel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ohlsen, Kari L.
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60.0%;
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60/269,308
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Pred. No. 3.
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; TELEX: 133521
; INFORMATION FOR SEO ID NO: 1
; SEQUENCE CHARACTERISTICS:
; LENGTH: 949 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-841-835-10
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LENGTH: 718
TYPE: PRT
RORANISM: Enterococcus faecalis
US-09-815-242-10901
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US-09-841-835-10
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                                                                  Query Match
Best Local Similarity 60.0
Matches 6; Conservative
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Best Local Similarity 66.7%;
Matches 6; Conservative
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APPLICANT: de Landa
APPLICANT: Smith,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-230 CIP1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/196,387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: de Lange, Titia
APPLICANT: Smith, Susan
TITLE OF INVENTION: A PROTEIN THAT BINDS TO TRF1 AND METHODS
TITLE OF INVENTION: OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
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529 AVASLHPKRK 538
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                                    1 AVAMMHQERK 10
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US20020076795A1
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411 Hackensack Avenue, 4th Floor
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                                                                                     Score 31; DB 10; Length 949; Pred. No. 4.8e+02;
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                                                                      Mismatches
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Search completed: July 11, 2003, 12:37:35

Job time : 3.93139 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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Match
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Listing
PIR_73:*
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Copyright (c) 1993 - 2003 Compuc
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pir2:*
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DB
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JX0364
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                                                                                                                                                                                                                                                                                SUMMARIES
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                      glycoprotein/polys
hypothetical prote
hypothetical prote
probable arylsulfa
antithrombin III -
neuroblast prolife
hypothetical prote
probable methylgal
fumarate reductase
protein tyrosine-p
enteropeptidase (E
                                                                                                                                        holliday junction
holliday junction
Holliday junction
finger protein Zfc
protein-tyrosine-p
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zinc finger protei
replicative DNA he
       Ras GTPase activat
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protein F17L21.16
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                                                                                                                                   protein-tyrosine-p
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	45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30
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	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
	506	397	334	318	318	318	318	318	301	253	236	217	217	216	148	138
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-	D71461	D64690	C69148	KIHUR3	KIRTR1	KIHUR1	KIRTR2	KIHUR2	T36520	G69109	A82287	F83502	В83944	AE0648	T24628	TTPGB
	hypothetical prote	signal-transducing	dTDP-glucose 4,6-d	ribose-phosphate d	hypothetical prote	conserved hypothet	phosphate transpor	hypothetical prote	resolvase BH2354 [nitrate/nitrite re	hypothetical prote	thyrotropin beta c				

ALIGNMENTS

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hypothetical protein [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
C;Caccession: H86177
C;Accession: H86177
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alon
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar,
ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim,
C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Malti, R.; Marzia
A;Authors: Salzberg, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallo
ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Reference and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Mccession: H86177
A;Mccession: H86171
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C:Species: Caenorhabditis elegans
C:Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C:Accession: T34435
R:Bradshaw, H.
submitted to the EMBL Data Library, February 1997
A:Description: The sequence of C. elegans cosmid K11H12.
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T34435
A;Molecule type: DNA
A;Residues: 1-578 <STO>
A;Cross-references: GB:AE005172; NID:g2494130; PIDN:AAB80639.1; GSPDB:GN00141
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A; Introns: 65/2; 218/3; 254/1; 301/1; 355/1
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A;Molecule type: DNA
A;Residues: 1-374 <BRA>
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Best Local S
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| 206 AVAMMHQ 212
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zinc finger protein wizL - mouse (Species: Mus musculus (house mouse) (Species: Mus musculus (house mouse) (C; Species: 22-Jan-1999 #sequence_revision 22-Jan-1999 #text_change 05-Nov-1999 (C; Accession: T00248 (C; Accession: T00248 (R.) Matsumoto, K.; Ishii, N.; Yoshida, S.; Shiosaka, S.; Wanaka, A.; Tohyama, M. submitted to the EMBL Data Library, March 1998 submitted to the EMBL Data Library, March 1998 A; Pescription: Molecular cloning and distinct developmental expression pattern of splice A; Reference number: Z14130
                     RESULT 5
H70234
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A; Gene: At:
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A; Residues: 1-1561 <MAT>
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A; Residues: 1-602 <STO>
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A; Map position:
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 replicative
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                                                                                                  604
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 DNA
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7; Conserv
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helicase homolog
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Pred. No.
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Pred. No.
Lyme disease spirochete plasmid G/lp28-2
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6-phosphofructokinase (EC 2.7.1.11) - Spiroplasma citri
N,Alternate names: phosphofructokinase 1; phosphohexokinase
C;Species: Spiroplasma citri
C;Date: 17-Aug-1990 #sequence_revision 14-Jul-1994 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:AE000786; NID:g2690008; PIDN:AAC66061.1; A;Experimental source: strain B31 C;Genetics:
A; Molecule type: I
A: Residues: 1-327
                                     A; Reference number: A; Accession: E35270
                                                                                                                      R; Chevalier, C.; Saillard, C.; Bove, J. Bacteriol. 172, 2693-2703, 1990
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A; Title: Complete Genomic
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Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 30-Jun-2002 C;Accession: AD2052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein all1970 [imported] - Nostoc sp. (strain PCC C; Species: Nostoc sp.
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A;Title: Genomic sequence of a Lyme disease spirochaete,
A;Reference number: A70100; MUID:98065943; PMID:9403685
A;Accession: H70234
                                                                                                   A; Title:
                                                                                                                                                             C; Accession: E35270
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A; Residues: 1-275 < KLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Bowman, C.;
Nature 390, 58
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                                                                                                                                                                                                                                                                                 RESULT 7
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                                                                                                                                                                                                                                                                                                                                           174 VAKHHQERK
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                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 7; Conserv
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                                                          A35270; MUID:90236934; PMID:2139649
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77.8%;
                                                                                                 nucleotide sequences of the Spiroplasma
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Pred. No. 24;
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Pred. No.
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M.; Yamada, M.; Yasuda, I
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D86539

D86539

C; Species: Chlamydophila pneumoniae, Chlamydophila pneumoniae (strain J138)
C; Species: Chlamydophila pneumoniae, Chlamydia pneumoniae
C; Date: O2-Mar-2001 #sequence_revision O2-Mar-2001 #text_change 23-Mar-2001
C; Accession: D86539
R; Shirai, M:; Hirakawa, H:; Kimoto, M.; Tabuchi, M.; Kishi, F.; Ouchi, K.; ShiNucleic Acids Res. 28, 2311-2314, 2000
A; Title: Comparison of whole genome sequences of chlamydia pneumoniae J138.
A; Reference number: A86491; MUID:20330349; PMID:10871362
A; Accession: D86539
A; Accession: D86539
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A;Note: the authors translated the codon GCT for residue 195 a C;Genetics:
A;Genetic code: SGC3
C;Superfamily: 6-phosphofructokinase; 6-phosphofructokinase 1
C;Keywords: ATP; phosphotransferase
F;5-280/Domain: 6-phosphofructokinase 1 homology <6PF1>
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A; Residues: 1-337 <ARN>
A; Cross-references: GB: AEOO1623; GB: AEOO1363;
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                                                                                                                             A;Gene: ruvB
C;Superfamily:
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A; Residues: 1-337 <STO>
A; Cross-references: GB:BA000008; NID:g8978762;
A; Experimental source: strain J138
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C; Superfamily:
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Pred. No. 29;
4; Mismatches
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A; Reference number: $12049;
A; Accession: $12053
A; Status: preliminary
A; Molecule type: mRNA
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C;Accession: Occasion: A;Krueger, N.X.; Streuli, M.; Salto, n. R;Krueger, N.X.; Streuli, M.; Salto, n. EMBO J. 9, 3241-3252, 1990
A;Title: Structural diversity and evolution
A;Title: Structural diversity and evolution
                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Superfamil
C; Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R:Valleley, E.M.A.; Mueller, U.; Ferguson, M.W.J.; Sharpe, I gene 119, 221-228, 1992
A;Title: Cloning and expression analysis of two ZFY-related A;Reference number: PC1143; MUID:93012990; PMID:1398103
A;Accession: PC1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          finger protein 2fc - American alligator (fragment)
C;Species: Alligator mississippiensis (American alligator)
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change
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C; Superfamily:
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                                                                                       protein-tyrosine-phosphatase (EC 3.1.3.48), receptor type epsilon precursor
C;Species: Homo sapiens (man)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C;Accession: S12053
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A; Residues: 1-337 < REA>
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A; Residues: 1-395 <VAL>
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                                                                                                                                                                                                                                                                                                                                                                                                                                 ;Superfamily: zinc finger protein ZFP-36;
;Keywords: DNA binding; zinc finger
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AR39, HL cells
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or human receptor-like PMID:2170109

protein

tyrosine

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A; Note: the authors translated the codon TCC for residue 788 as Ala
R; Hashlmoto, N.; Zhang, W.R.; Goldstein, B.J.
Blochem. J. 284, 569-576, 1992
A; Title: Insulin receptor and epidermal growth factor receptor dephosphorylation by thre
A; Title: Insulin receptor and epidermal growth factor receptor dephosphorylation by thre
A; Title: Insulin receptor and epidermal growth factor receptor dephosphorylation by thre
A; Title: Insulin receptor and epidermal growth factor receptor dephosphorylation by thre
A; Title: Insulin receptor and epidermal growth factor receptor dephosphorylation by thre
A; Reference number: $23126; MUID:92287069; PMID:1599438
A; Accession: $240-267, 'I', 269-354, 'T', 356-501 <HAS>
R; Zhang, W.R.; Goldstein, B.J.
A; Coldstein, B.J.
Biochem. Biophys. Res. Commun. 178, 1291-1297, 1991
A; Title: Identification of skeletal muscle protein-tyrosine phosphatases by amplification.
A; Reference number: JH0450; MUID:91337074; PMID:1651716
A; Reference number: JH0450; MUID:91337074; PMID:1651716
A; Residues: 324-354, 'T', 356-434 <ZHA>
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C; Function:
A; Description: catalyzes the hydrolysis of peptidyl-phosphotyrosine to release C; Superfamily: protein-tyrosine-phosphatase, receptor type alpha; leukocyte con C; Keywords: phosphoprotein; phosphoric monoester hydrolase; receptor; transmemb F;1-19/Domain: signal sequence #status predicted <SIG>F;20-700/product: protein-tyrosine-phosphatase, receptor type epsilon #status | F;47-63/Domain: transmembrane #status predicted <TMN>F;84-63/Domain: leukocyte common antigen cytosolic domain homology <LAC>F;159-38/Domain: protein-tyrosine-phosphatase homology <PTP1>F;35/Active site: Cys (phosphocysteine intermediate) #status predicted F;341/Binding site: substrate phosphate (Arg) #status predicted F;630/Active site: Cys (phosphocysteine intermediate) #status predicted F;630/Activ
     C:Species: Rattus norvegicus (Norway rat)
C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C:Accession: JC1285; S23253; JH0450
R:Moriyama, T.; Fujiwara, Y.; Imai, E.; Takenaka, M.; Kawanishi, S.; Inoue, T.;
Biochem. Biophys. Res. Commun. 188, 34-39, 1992
A:Title: CDNA cloning of rat LRP, a receptor like protein tyrosine phosphatase, A:Reference number: JC1285; MUID:93038682; PMID:1417854
A:Accession: JC1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Residues: 1-700 < A;Cross-references: C;Genetics:
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A; Residues: 1-796 <MOR>
A; Experimental source: kidney
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N;Alternate names: protein-tyrosine-phosphatase LRP
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A;Cross-references: GDB:131385;
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Rattus norvegicus (Norway rat)
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leukocyte common antigen cytosolic domain
protein-tyrosine-phosphatase homology <PTI</pre>
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F;436/Active site: Cys (phosphocysteine intermediate) #status predicted F;442/Binding site: substrate phosphate (Arg) #status predicted F;726/Active site: Cys (phosphocysteine intermediate) #status predicted
                                                                                                                                                                                                                        F;552-774/Domain: protein-tyrosine-phosphatase homology <PTP2> F;436/Active site: Cys (phosphocysteine intermediate) #status
                                                                                                                                                          F;732/Binding site: substrate phosphate (Arg) #status predicted
                                                                                                Query Match
Best Local
455
                                    4 MMHQERK
                                                                             Similarity 6; Conserv
                                                                             Conservative
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Pred. No.
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72;
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A:Cross-references: GB:L13607
A:Note: sequence extracted from NCBI backbone (NCBIN:13:A:Note: sequence extracted from NCBI backbone (NCBIN:13:A:Note: sequence extracted from NCBI backbone (NCBIN:13:A:NCBIN:13: A;Cross-references: GB:M36033; A;Note: the authors translated A;Accession: A35501 A; Molecule type: mRNA A; Residues: 1-829 <MA1> A; Molecule type: DNA A; Residues: 1-829 <WON> A; Title: Leukocyte common antigen-related phosphatase (LRP) A; Reference number: A47373; MUID:94010906; PMID:8406469 C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 21-Jan-2000 C;Accession: A47373; B35501; A35501; PS0367; S40285; S40286; A36004; D61180 R;Wong, E.C.; Mullersman, J.E.; Thomas, M.L. Genomics 17, 33-38, 1993 A; Accession: A47373 protein-tyrosine-phosphatase (EC 3.1.3.48), receptor type alpha-precursor -N;Alternate names: leukocyte common antigen-related protein LRP; PTPTY28; re Mus musculus (house mouse) NID:g198876; PIDN:AAA39448.1; PID:g198877; GB:M33671 the codon GAT for residue 30 as Tyr (NCBIN:137623, protein-tyrosine-phosphatase gene NCBIP: 137624) structure: conservat receptor mouse 'n

R;den Hertog, J.; Pals, C.E.G.M.; Jonk, L.J.C.; Kruijer, W. Biochem. Blophys. Res. Commun. 184, 1241-1249, 1992
Biochem. Blophys. Res. Commun. of a novel murine non-receptor A;Reference number: JH0609; MUID:92272714; PMID:1590786 A;Status: nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 322-325,'G',327-356 <DEN> A; Reference number: A; Accession: PS0367 A;Molecule type: mRNA A;Residues: 1-267,'Y',305-829 <MA2> A;Cross-references: GB:M36033; GB:M GB:M33671 protein tyrosine

phos

A;Experimental source: embryonal carcinoma cell, P19
R;Hendriks, W.; Brugman, C.; Zeeuwen, P.; Schepens,
submitted to the EMBL Data Library, June 1993
A;Description: Assessment of the expression levels o
A;Reference number: S40280
A;Accession: S40280
A;Accession: S40287
A;Rolecule type: mRNA
A;Residues: 358-467 <HEN> P19 cell of murine protein-tyrosine J.; Wieringa,

phospha

A;Cross-references: A;Accession: \$40286 EMBL: Z23054; NID: g438145; PIDN: CAA80589.1; PID:g438146

PID: 9438148

A;Molecule type: mRNA
A;Residues: 651-756 (+HZ2>
A;Cross-references: EMBL:Z23055; NID:g438147; PIDN:CAA80590.
A;Cross-references: EMBL:Z23055; NID:g438147; PIDN:CAA80590.
A;Cross-references: EMBL:Z23055; NID:g438147; PIDN:CAA80590.
A;Chlessinger, J.
Proc. Natl. Acad. Sci. U.S.A. 87, 6112-6116, 1990
A;Title: Cloning and expression of a widely expressed recept.
A;Reference number: A36004; MUID:90349565; PMID:2166945 A; Accession: A36004 / expressed receptor pMID:2166945 tyrosine phosphatase

A; Residues: 1-230, 'A; Cross-references: 1-230, 'L', 232-267, 'Y', 305-410, 'S', 412-829

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R:Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.; ansen, N.F.; Hughes, B.; Hulzar, L.

Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C. A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C. C.A.; Li, J.H.; Li, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marzialli, Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.

A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, Ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.

A;Reference and analysis of Chromosome 1 of the plant Arabidopsis.

A;Reference number: A86141; MUID:21016719; PMID:11130712
                                                                                             Query Match
Best Local Similarity
Contents 6; Conserve
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F;167-829/Domain: intracellular #status predicted <TMM>
F;167-829/Domain: intracellular #status predicted <TMM>
F;167-827/Domain: leukocyte common antigen cytosolic domain homology <LAC>
F;585-807/Domain: protein-tyrosine-phosphatase homology <PTP>
F;21,47,51,68,80,86,104,124/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;469/Active site: Cys (phosphocysteine intermediate) #status predicted
F;475/Binding site: substrate phosphate (Arg) #status predicted
F;759/Active site: Cys (phosphocysteine intermediate) #status predicted
F;759/Active site: substrate phosphate (Arg) #status predicted
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C:Species: Arabidopsis thaliana (mouse-ear cress)
C:Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
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A; Residues: 358-467 < YIA>
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Blood 78, 2222-2228, 1991
                                                                                                                                                                                                                                                           A; Map position: 1
                                                                                                                                                                                                                                                                                      A; Gene: F17L21.16
                                                                                                                                                                                                                                                                                                                                                     A; Cross-references: GB:AE005172; NID:99802545; PIDN:AAF99747.1; GSPDB:GN00141
                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-229 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Reference number: A86141; A; Accession: C86399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Accession: C86399
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C; Function:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Status: not compared with conceptual translation
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24 AVATTHQQKK 33
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  K6PF_HUMAN
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ANA_DROME
MGLA_TREPA
FRDA_WOLSU
PTRA_HUMAN
HEM_TOMME
IQG1_HUMAN
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003348 rattus norv
P18052 mus musculu
P89116 spodoptera
047334 escherichia
047334 escherichia
047334 escherichia
047334 escherichia
056342 treponema p
P17412 wolinella s
P18433 homo sapien
P98072 bos taurus
P55162 drosophila
P46940 homo sapien
091kf1 mus musculu
P01123 bos taurus
028376 equus cabal
P79357 lama glama
P1124 sus scrofa
P09329 homo sapien
P11908 homo sapien
P11908 homo sapien
095271 homo sapien
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095275 homo sapien
095275 homo sapien
095276 mus musculu
094606 homo sapien
095014 zymomonas m
P45527 escherichia
09p105 bomo sapien
095015 mus musculu
094606 homo sapien
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P23469
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P20275 spiroplasma
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3 chlamydia p
9 homo sapien
8 rattus norv
         RRR R R
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  InterPro; IPR000215; Serpin. Pfam; PF00079; Serpin; 1.
SMART; SM00993; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
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P20193 drosophila	SUV3_DROME	_	1169	60.0	30	5
P97435 mus musculu	ENTK_MOUSE	ب	1069	60.0	30	4
P98074 sus scrofa	ENTK_PIG	ب	1034	60.0	30	ü
P98073 homo sapien	ENTK_HUMAN	ب	1019	60.0	30	12
P13670 vibrío harv	CHB_VIBHA	Ц	883	60.0	30	Ξ
Q8zbt8 yersinia pe	SYA_YERPE	_	875	60.0	30	0
013597 septoria ly	ER24_SEPLY	ب	512	60.0	30	39
Q01447 fusarium so	ER24_FUSSO	⊢	485	60.0	30	8
P41361 bos taurus	ANT3_BOVIN	ب	433	60.0	30	37
P23071 myxococcus	RT65_MYXXA	_	427	60.0	30	6
Q9uyk5 pyrococcus	SAHH_PYRAB	\vdash	422	60.0	30	5
Q9wu56 mus musculu	TRUA_MOUSE	L	393	60.0	30	34

ALIGNMENTS

CPro; IPR		
Genew; HGNC:13902; SERPINB7. MTM: 603357: -	N G	
EMBL; AF027866; AAC64506.1;		
D88575; BAA31232.1;		
send an email to incensectsb-sib.cn).	er	
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the European Bioinformatics institute. There are no restrictions on		
ween the Swiss Institute of Bioinformatics and the EMBL outs		
This SWISS-PROT entry is copyright. It is produced through a collaboration		
 TISSUE SPECIFICITY: Predominantly expressed in mesangial cells. SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBPAMILY. 	22 	
- SUBCELLULAR LOCATION: Cytoplasmic (By similarity)		
its action as a serpin.	88	
- FUNCTION: Might function as an inhibitor of Lys-specific		
<pre>19A nephropathy."; J. Clin. Invest. 102:828-836(1998).</pre>		
"A mesangium-predominant gene, megsin, is a new serpin upregulated in		
	RA O	
Mivata T., Nangaku M., Suzuki D., Inagi R., Uragami K., Sakai H.,		
TISSUE-Mesangial cells; MEDLINE-98376492; PubMed-9710452;	2 2 2 2 2 2	
SEQUENCE FROM N.A.		
[2]	RN C	
akaryocyte maturation activity.";		
acterization of		
Nakanishi T., Nakazato H., Teramura M., Mizoguchi H., Yamaguchi N.;		
Tsujimoto M., Tsuruoka N., Ishida N., Kurihara T., Iwasa F.,		
MEDLINE=97326116; PubMed~9182567;		
[1] SEOUENCE FROM N.A.	RP C	
Eukaryota; metazoa; chordata; crahrata; vertebiata; Eutereoscomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	86	
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SPB7_HUMAN STANDARD; PRT; 380 AA. O75635;	AC S	
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Submitted (SSP-1997) to the EMBL/GenBank/DDBJ databases.
-:-CATALYTIC ACTIVITY: ATP + D-fructose 6-phosphate - ADP
fructose 1,6-bisphosphate.
-:-PARHWAY: KEY CONTROL STEP OF GLYCOLYSIS.
-:-SUBUNIT: HOMOTETRAMER (BY SIMILARITY).
-:-SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
-:-SIMILARITY: BELONGS TO THE PHOSPHOFRUCTOKINASE FAMILY.
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ACT_SITE
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                                                                           PRINTS; PRO0476; PHERCTKINASE.
PRODOM: PD000707; PPFTUCKINASE; I.
PROSITE; PS0043; PROSPHOFRUCTOKINASE;
Kinase; Transferase; Glycolysis.
SEQUENCE 327 AA; 35197 MW; 19D9D471
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P20275;
                                                                                                                                                                   HSSP;
                                                                                                                                                                             EMBL; AF012877; AAB69998.1; -. PIR; E35270; E35270.
                                                                                                                                                                                                               entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                           use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN-ATCC 27556 /
                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Organization and nucleotide sequences of the Spiroplasma citri genes for ribosomal protein S2, elongation factor Ts, spiralin, phosphofructokinase, pyruvate kinase, and an unidentified protein."; J. Bacteriol. 172:2693-2703(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
STRAIN-ATCC 27556 / R8A2;
MEDLINE-90236934; PubMed-2139649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria; Firmicutes;
Spiroplasmataceae; Spi
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01-FEB-1996 (Rel. 33,
16-OCT-2001 (Rel. 40,
6-phosphofructokinase
                                                                                                                                           Pfam;
                                                                                                                                                                                                                                                                 the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chevalier C., Saillard C.,
                                                                                                                                                       InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Phosphohexokinase).
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                                                                                                                                       Pro; IPR000023; Ppfruckinase PF00365; PFK; 1.
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                                                                                                                                                                   P06998;
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                           Similarity 6; Conserv
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E 347 348 REACT
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10; Conservative
VAMMHOERK
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                            Conservative
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Last annotation update)
(EC 2.7.1.11) (Phosphofructokinase)
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                                       Score 33;
Pred. No.
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Pred.
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NUVB_CHLPN
ID RUVB_C
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RX MEDLI
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                                                                                                                                                                                                                                                between the Swiss Institute of Bioinformat the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See or send an email to licenseagreement (See
                                                                                                                                                                                                                                                                                                                                                                                                                      Shirai M., Hirakawa H., Kimoto M., Tabuchi M., Kishi F., Ouchi K., Shirai M., Hirakawa H., Kimoto M., Tubuchi M., Kishi F., Ouchi K., Shiba T., Ishii K., Hattori M., Kuhara S., Nakazawa T.; Shiba T., Ishii K., Hattori M., Kuhara S., Nakazawa T.; "Comparison of whole genome sequences of Chlamydia pneumoniae J138 from Japan and CML029 from USA."; Nucleic Acids Res. 28:2311-2314(2000).

1- FUNCTION: THE RUYA-RUYB COMPLEX IN THE PRESENCE OF ATP RENATURES CRUCIFORM STRUCTURE IN SUPERCOILED DAN WITH PALIMDROMIC SEQUENCE, INDICATING THAT IT MAY PROMOTE STRAND EXCHANGE REACTIONS IN HOMOLOGOUS RECOMBINATION. RUYAB IS AN HELICASE THAT MEDIATES THE HOLLIDAY JUNCTION MIGRATION BY LOCALIZED DENATURATION AND REANNELING (BY SIMILARITY).

1-1- SUBUNIT: FORMS A COMPLEX WITH RUYA (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=20150255; PubMed=10684935;
Read T.D., Brunham R.C., Shen C., Gill S.R., Heidelberg
White O., Hickey E.K., Peterson J., Utterback T., Berry
Linher K., Weidman J., Khouri H., Craven B., Bowman C.,
Gwinn M., Nelson W., DeBoy R., Kolonay J., McClarty G.,
Eisen J., Fraser C.M.;
                                                                                              InterPro; IPR003593;
InterPro; IPR003959;
InterPro; IPR004605;
                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a coefficient the Swiss Institute of Bioinformatics and the EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Genome sequences of Chlamydia trachomatis pneumoniae AR39.";
Nucleic Acids Res. 28:1397-1406(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chlamydia pneumoniae (Chlamydophila pneumoniae). Bacteria; Chlamydiales; Chlamydiaceae; Chlamydophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-OCT-2001 (Rel. 40, Last sequence up
16-OCT-2001 (Rel. 40, Last annotation
Holliday junction DNA helicase ruvB.
RUVB OR CPN0390 OR CP0365
                                      TIGRFAMs;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=20330349; PubMed=10871362;
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"Comparative genomes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=99206606; PubMed=10192388; Kalman S., Mitchell W., Marathe R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-CWL029
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CP0365; -.
                                                          PF00004; AAA;
; SM00382; AAA
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                                          00382; AAA; 1.
TIGR00635; ruvB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Grimwood J., Davis R.W., re genomes of Chlamydia pno 21:385-389(1999).
                      SOS response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
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                      ATP-binding;
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                        recombination;
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and
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Salzberg
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K., Bass
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                        Helicase;
                                                                                                                                                                                                                                                                                                                                                      a collaboration -
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Best Local :
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CONFLICT
SEQUENCE
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P23469;
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              TRANSMEM
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                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tyrosine phosphatases.";
EMBO J. 9:3241-3252(1990).
-i- CATALYTIC ACTIVITY: Protein tyrosine phosphate + H(2)O - protein tyrosine + phosphate.
-i- SUBCELLULAR LOCATION: Type I membrane protein.
-i- SIMILARITY: CONTAINS 2 PROTEIN-TYROSINE PHOSPHATASE DOMAINS
                                                                                                                                                                                  PROSITE: PS00383; TYR_PHOSPHATASE_1; 2
PROSITE: PS50056; TYR_PHOSPHATASE_2; 2
PROSITE: PS50055; TYR_PHOSPHATASE_PTP;
                                                                                                                                                                                                                               PRINTS; PR00700; PRTYI
SMART; SM00194; PTPC;
                                                                                                                                                                                                                                                          InterPro; IPR000387; TYR_phosphatase.
InterPro; IPR000242; Tyr_PP.
Pfam; PF00102; Y_phosphatase; 2.
                                                                                                                                                                                                                                                                                                                                                      EMBL; X54134; CAA38069.1; PIR; S12053; S12053.
                                                                                                                                                                                                                                                                                                                                                                                                      entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Mammalia; Eutheria;
   CARBOHYD
                                                                                                          DOMAIN
                                                                                                                           CHAIN
                                                                                                                                                                    Glycoprotein;
                                                                                                                                                                                                                                                                                                           MIM; 600926; -
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Genew; HGNC:9669; PTPRE.
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"Structural diversity and evolution
tyrosine phosphatases ":
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01.NOV-1991 (Rel. 20, Last sequence update)
15.JUN-2002 (Rel. 41, Last annotation update)
Protein-tyrosine phosphatase epsilon precursor
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VAVLHQDKK 13
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Metazoa; Chordata; C
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PROTEIN-TYROSINE F
BY SIMILARITY.
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T -> A /TN ---
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Pred. No. 11;
                                                                           POTENTIAL.
CYTOPLASMIC (POTENTIAL).
                                                                                                        EXTRACELLULAR
                                                                                                                       PROTEIN-TYROSINE PHOSPHATASE
                                                                                                                                                                    Hydrolase;
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D591B593F342EA2F CRC64;
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Phosphorylation;
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                                                                                                                                                                                                                                                                                           EMBL; L01702; AAA41983.1; -.
HSSP; P18052; 1YFO.
InterPro; IPR000387; TYR_phosphatase.
InterPro; IPR000242; Tyr_PP.
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Inoue T., Noguchi T., Tanaka T., Kamada T., Ueda N
"cDNA cloning of rat LRP, a receptor like protein
phosphatase, and evidence for its gene regulation
mesangial cells.";
                                                                                                                                                                                                         PROSITE; PS00383; TYR_PHOSPHATASE_1; 2. PROSITE; PS50056; TYR_PHOSPHATASE_2; 2. PROSITE; PS50055; TYR_PHOSPHATASE_PTP; 2.
                                                                                                                                                                                                                                                                                                                                                                       modified and this statement is not removentities requires a license agreement (S or send an email to license@isb-sib.ch).
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01-FEB-1994 (Rel.
15-JUN-2002 (Rel.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
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SIMILARITY: CONTAINS 2 PROTEIN-TYROSINE PHOSPHATASE DOMAINS
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"Structural basis for inhibition of receptor proposed by the structural basis for inhibition of receptor proposed by the structural basis for inhibition.";
Nature 382:555-559(1996).

-I CATALYTIC ACTIVITY: Protein tyrosine phosphate.
-I CATALYTIC ACTIVITY: Protein tyrosine protein tyrosine + phosphate.
-I SUBCELULAR LOCATION: Type I membrane protein ALTERNATIVE PRODUCTS: 2 ISOFORMS; A LONG FORM A SHORT FORM; ARE PRODUCED BY ALTERNATIVE SPINATIVE SPINATI
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STRAIN-BALB/C; TISSUE-Brain;
MEDLINE-95134232; PubMed-7832766;
Hendriks W., Schepens J., Brugman C., Ze
Hendriks W., Schepens J., Brugman C., Ze
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MEDLINE=93086603; PubMed=1454056;
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P01-NOV-1997 (Rel. 35, Last sequence update)
P01-NOV-1997 (Rel. 31, Last sequence update)
P15-JUN-2002 (Rel. 41, Last annotation update)
E Caspase-1 precursor (EC 3.4.22.-).
S spodoptera frugiperda (Fall armyworm).
S spodoptera frugiperda (Fall armyworm).
C Eukaryota; Metazoa; Arthropoda; Mandibulata; Par CC Insecta; Pterygota; Neoptera; Endopterygota; Leg CC Ditrysia; Noctuoidea; Noctuidae; Amphipyrinae;
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Matches 5
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InterPro; IPR002138; ICE_p10.
InterPro; IPR001309; ICE_p20.
InterPro; IPR001309; ICE_p10; 1.
Pfam; PF00656; ICE_p20; 1.
SMART; SM00115; CASC; 1.
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Polysialic acid capsule
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J. Biol. Chem. 272:1421-1424(1997).
-I- FUNCTION: INVOLVED IN THE ACCTIVATION CASCADE OF CASPASES
RESPONSIBLE FOR APOPTOSIS EXECUTION (BY SIMILARITY). INHIBITED INTERPRETABLE FOR APOPTOTIC PROTEIN P35. CLEAVES P35 AND NUCLEAR IMMUNOPHILIN FKBP46.
-I- SUBUNIT: HETERODIMER OF A 19/18 kDa (P19/18) AND A 12 kDa (P12) SUBUNIT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
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Simpson D.A., Hammarton T.C., Roberts I.S.;
"Transcriptional organization and regulation of
of the Escherichia coli K5 capsule gene cluster.
J. Bacteriol. 178:6466-6474(1996).
-!- SIMILARITY: BELONGS TO THE SIS FAMILY. GUTQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE: PS01122; CASPASE_CYS;
PROSITE: PS01121; CASPASE_HIS;
PROSITE: PS50207; CASPASE_P10;
PROSITE: PS50208; CASPASE_P20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; U81510; AAC47442.1; -. HSSP; P42574; 1CP3. MEROPS; C14.015; -.
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                                                                                                                                                                                                                                                                                           Bacteria; Proteobacteria; Escherichia.
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                                                                                                                                                       MEDLINE-97086613; PubMed-8932302;
                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                              NCBI_TaxID=562;
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SIMILARITY: BELONGS TO PEPTIDASE FAMILY C14.
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  THE SIS FAMILY. GUTQ/KPSF CBS DOMAINS.
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Pred. No.
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CASPASE-1 SUBUNIT P12.
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                              subdivision; Enterobacteriaceae;
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                             Transcription regulation; SEQUENCE 401 AA; 46432
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Query Match
Best Local
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"A locus that contributes to colonization of the intestinal tract Bacteroides thetaiotaomicron contains a single regulatory gene (che that links two polysaccharide utilization pathways.";

J. Bacteriol. 174:7185-7193(1992).

-!- FUNCTION: LINKS THE HEPARIN AND THE CHONDROITIN SULFATE UTILIZATION PATHWAYS WHICH CONTRIBUTE TO THE COLONIZATION OF THE EXPRESSION OF CHONDRO-6-SULFATASE.

-!- SIMILARITY: BELONGS TO THE ASLB/ATSB FAMILY.
                                                                             the European Bioinformatics Institute. There use by non-profit institutions as long as modified and this statement is not removed. Use ntitles requires a license agreement (See htt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL-1993
15-JUL-1998
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InterPro; IPR004800; KpsF.
InterPro; IPR001347; SIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or send an email to license@isb-sib.ch).
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                                                          entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=93054330; PubMed=1429442;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacteroides
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PIR; A47014; A47014
                 EMBL; L00678; AAA22908.1;
                                                                                                                                      SWISS-PROT entry is copyright. It is produced through a collab
een the Swiss Institute of Bioinformatics and the EMBL outst
European Bioinformatics Institute. There are no restrictions
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PF01380; SIS; 1.
; SM00116; CBS; 2.
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Pred. No. 17;
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Activator MW; 43C4F

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RESULT 10
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                                   Abril J.F., Agbayani A., An H.-J., Andrews-Pflanckoch C., Baldwin D.,
Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
Becson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
Becson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Mays A.D., Dew I. Dietz S.M.,
Dodson K., Doup L.E., Downes M., Dugan-Roccha S., Dunkov B.C., Dunn P.,
RA Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W.,
RA Bosler C., Gabriellan A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Helman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Llu X., Mattel B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Mannet e M. Mattel B., McIntosh T.C., Morris J., Moshrefi A.,
RA Mannet e M. Mattel B., McIntosh T.C., Morris J., Moshrefi A.,
RA Mannet e M. Maryky M., Marryy C., Morris J., Moshrefi A.,
RA Mannet e M. Maryky M., Maryky M., Maryky M., Maryky M., Markulov G., Milshina N.V., Moshry M., Maryky M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-Berkeley;
MEDLINE-20196006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Celniker S.E., Agbayani A., Arcaina T.T., Baxter E., Blazej R.G., Butenhoff C., Champe M., Chavez C., Chew M., Cicsiolka L., Doyle C.M. Farfan D.E., Galle R., George R.A., Harris N.L., Hoskins R.A., Houston K.A., Hummasti S.R., Karra K., Kearney L., Kim E., Lee B., Lewis S., Li P., Lomotan M.A., Mazda P., Moshrefi A.R., Moshrefi M., Nixon K., Pacleb J.M., Park S., Pfeiffer B., Poon L., Punch E., Sequeira A., Sethi H., Snir E., Svirskas R.R., Twomey B., Wan K.H., Weinburg T., Zhang R., Zieran L.L., Rubin G.M.; Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
  Merkulov G., Mil
Mount S.M., Moy
Nelson D.R., Nel
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Bukaryota; Metazoa; Arthropoda; Mandibulata;
Insecta; Pterygota; Neoptera; Endopterygota;
Muscomorpha; Ephydroidea; Drosophilidae; Dros
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MEDLINE=93327423; PubMed=7916657;
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  Murphy B., K.A., Nixon
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ota; Diptera; Brachycera;
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MGLA_TREPA
ID MGLA_T
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DE Galact
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OS Trepon
OC Bacter
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RN [1]
RP SEQUEN
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                                                         MEDLINE-97080510; PubMed-8921855; MEDLINE-97080510; PubMed-8921855; MEDLINE-97080510; PubMed-8921855;
                                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      use by non-profit institutions as long modified and this statement is not removed: entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                              Treponema pallidum.
Bacteria; Spirochaetales;
                                                                                                                                                                                                                         Q56342;
  SEQUENCE FROM N.A
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European Bioinformatics Institute
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FUNCTION: NEGATIVELY REGULATES
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                           ike operon in T: 115-121(1996).
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                                       pallidum,
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                                       syphilis spirochete.";
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SEQUENCE
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                                                                                                                             Lauterbach F., Koertner C., Albracht S.P., Unden G., Kroeg "The fumarate reductase operon of Wolinella succinogenes. and expression of the frdA and frdB genes."; Arch. Microbiol. 154:386-393(1990).
                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE-91058386; PubMed-2244791;
                                                                                                                                                                                                                                                                                                                                               Bacteria; Proteobacteria; Wolinella.
                                                                                                                                                                                                                                                                                                                                                                                                                   P1/412;
01-AUG-1990 (Rel. 15, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
5...marate reductase flavoprotein subunit (EC 1.3.99.1).
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Science 281:375-388(1998).
-I- FUNCTION: PART OF THE BINDING-PROTEIN-DEPENDENT TRANSPORT SYSTEM
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InterPro; IPR003339; ABC_transportr.
Pfam; PF00005; ABC_tran; 2.
ProDom; PD000006; ABC_transportr; 2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMART; SM00382; AJ
PROSITE; PS00211;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Complete genome sequence of Treponema pallidum, the syphilis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FUNCTION: PART OF THE STREET RESPONSIBLE FOR ENERGY COUPLING TO FOR GALACTOSIDES, PROBABLY RESPONSIBLE FOR ENERGY COUPLING TO THE TRANSPORT SYSTEM (BY SIMILARITY).

SUBCELLULAR LOCATION: Membrane-associated (Potential).

SIMILARITY: BELONGS TO THE ABC TRANSPORTER FAMILY. MGLA SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss institute of Bioinformatics and the EMBL outstation - European Bioinformatics institute. There are no restrictions on its European Bioinformatics institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U48416; AAC44585.1; -. AE001242; AAC65648.1; TP0685; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VAMVHQE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VAMMHQE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S00211; ABC_TRANSPORTER; 1.
Sugar transport; Membrane; ATP-binding; Complete proteome.
37
44
ATP (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 496 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44
55191
                              Ringel M., ) to the EM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64.0%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ¥.
                                                                                                                                                                                                                                                                                                                                                                     epsilon subdivision; Helicobacter group;
                              EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                      Schmidt E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B6F63D53C5CD1411 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    656
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                There are no restrictions ing as its content is in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                        Kroeger A.;
DBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
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                                                                                                                                                                                                            Kroeger A.;
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                                                                                                                                                                                 Sequence
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, Garland S.,
Smith H.O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for
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PTRA_HUMAN
ID PTRA_H
AC P18433
DT 01-NOV
DT 15-JUN
DE Protei
DE Protei
DE PTRA 1
GN PTRA 0
OS Homo s
OC Eukary
OC Mammal
OX NCBI_T
RN [1]
                                                                                                                                                                                                                                                                                                                                                  RESULT
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                                                                                                                                                                                                                                                                                            Query Match
Best Local
Matches
                                                                                                                                                                                                                                                                                                                                               Oxidoreductase;

NP_BIND 9

BINDNG 43

ACT_SITE 257

ACT_SITE 273

CONFLICT 281

SEQUENCE 656 A
                                                                                                         PTRA_HUMAN STANDARD; PRT; 802 AA.

P1843; Q14513;

01-NOV-1990 (Rel. 16, Created)

01-NOV-1990 (Rel. 16, Last sequence update)

15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWI:
between
            Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9606;
                                                                                  alpha)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR003953;
InterPro; IPR003952;
InterPro; IPR004112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lancaster C.R.D., Gross R., Simon J.;
"A third crystal form of Wolinella succinogenes reductase reveals domain closure at the site of Eur. J. Biochem. 268:1820-1827(2001).
-I- CATALYTIC ACTIVITY: Succinate + acceptor - 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X-RAY CRYSTALLOGRAPHY (2.2 ANGSTROMS), AND REVISIONS TO 281-289.
MEDLINE=20052158; PubMed=10586875;
Lancaster C.R.D., Kroeger A., Auer M., Michel H.;
"Structure of fumarate reductase from Wolinella succinogenes at 2.2
                                                     Homo sapiens
                                                                     PTPRA OR PTPA.
                                                                                               Protein-tyrosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR; S10165; S10165
PIR; B44954; B44954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            X-RAY CRYSTALLOGRAPHY (3.1 ANGSTROMS)
MEDLINE-21145485; PubMed-11248702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PDB; 1QLA; 29-NOV-99.
PDB; 1QLB; 29-NOV-99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nature 402:377-385(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE;
                                                                                                                                                                                                                                                                                                                        Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COPACTOR: FAD; COVALENTLY LINKED.

SUBUNIT: FUMARATE DEHYDROGENASE PORMS PART CONTAINING THREE SUBUNITS: A FLAVOPROTEIN, A CYTOCHROME B-556.

SIMILARITY: TO THE FLAVOPROTEIN SUBUNITS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUMARATE REDUCTASE AND OF SUCCINATE DEHYDROGENASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1QLB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SWISS-PROT entry is copyright. It is produced through sen the Swiss Institute of Bioinformatics and the EM
                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                               PF00890; FAD_binding_2; 1.
PF02910; succ_DH_flav_C; 1.
TE; PS00504; FRD_SDH_FAD_BIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AJ000662; CAA04214.1; -.
                                                                                                                                                                                                                                                                                            Similarity
5; Conserv
                                                                                                                                                                                                                                        AIALIHQDGK 190
                                                                                                                                                                                                                                                                AVAMMHQERK 10
                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S10165.
                                                     (Human)
                                                                                                                                                                                                                                                                                                                                                  ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                Electron
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43
257
273
289
72834
                                                                                             phosphatase
                                                                                                                                                                                                                                                                                                                                                                                                                     FRD_SDH_FAD_BINDING; 1.
Lectron transport; Flavoprotein;
23 FAD (AMP PART) (POTE)
                           Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FRD/SDH_FAD.
Succ_DH_flav_C.
                                                                                                                                                                                                                                                                                                       64.0%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FAD_bind2
                                                                                                                                                                                                                                                                                                                                                  MW.
                                                                                                                                                                                                                                                                                            Score 32; DB.
Pred. No. 37;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                               FAD (COVALENT)
BY SIMILARITY
BY SIMILARITY
BY SIMILARITY
COUGHREMP -> RCGWTPIHA (IN
DF4D499571412326 CRC64;
                         Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                   (AMP PART) (POTENTIAL).
                                                                                             precursor
                                                                                                                                                                                                                                                                                                                       1;
                                                                                                (E)
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                                                                                                                                                                                                                                                                                                                    Length 656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fumarate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    quinol:fumarate fumarate reduct
                                                                                                3:1.3.48) (R-PTP-
                                                                                                                                                                                                                                                                                                                                                                                                                                   FAD;
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                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENZYME COMPLEX
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                                                                                                                                                                                                                                                                                                                                                                                                                                   3D-structure
                                                                                                                                                                                                                                                                                                                                                               REF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a collaboration
                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     outstation
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                                                                                                                                                                                                                                                                                          Gaps
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RA Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R., RA Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R., RA Deloukas P., Barlow K.F., Bates K.N., Beard L.M., Beare D.M., RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M., RA Beasley O.P., Blrd C.P., Blakey S.E., Bridgeman A.M., Brown A.J., RA Beasley O.P., Burlot R.P., Carder C., Carter N.P., RA Buck D., Burrill W.D., Butler R.P., Carder C., Clark S.Y., Clee C.M., RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M., RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Johnson R.D., Dunn M., RA Hummond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J., RA Hummond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J., RA Hummond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Lawlor S.R., King A., King A., Knights A., Laird G.K., Lawlor S.R., RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.R., RA Marsh V.L., Martin S.L., McConnachie L.J., McLay K., McMurray A.A., RA Milles S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T., RA Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Nickerson T., RA Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H., RA Swuen R.M., Sycamore N., Taylor R., Sebra H.K., Showhkeen R., Sins S., RA Swuen R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A., RA Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S., RA Mintebead S.L., Whittaker P., Willey D.L., Walliams L., Williams S.A., RA Mintebead S.L., Whittaker P., Willey D.L., Bettley D.R., Beck S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic
[5]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDLINE=91032191; PubMed=2172030;

Jirik F.R., Janzen N.M., Melhado I.G., Harder K.W.;

"Cloning and chromosomal assignment of a widely exp:
receptor-like protein-tyrosine phosphatase.";
FEBS Lett. 273:239-242(1990).
     This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Sequence of a cDNA related peptide)."; Nucleic Acids Res.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-91088320; PubMed-2175890;
Ohagi S., Nishi M., Steiner D.F.;
"Sequence of a cDNA encoding huma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Krueger N.X., Streuli M., "Structural diversity and tyrosine phosphatases.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE-90349565; PubMed-2166945;
Sap J., D'Eustachio P., Givol D., Schlessinger
"Cloning and expression of a widely expressed;"
                                                                                                                                                                Nature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kaplan
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                                                    tyrosine + phosphate.
SUBCELLULAR LOCATION:
SIMILARITY: CONTAINS
                                                                                                                                  DNA sequence and comparativure 414:865-871(2001).
CATALYTIC ACTIVITY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. 9:3241-3252(1990).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morse
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., Schlessinger J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sci.
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B., Huebner K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sci.
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     is
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protein-tyrosine-phosphatases
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T -> M (IN REF. 4).

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- IS SUBUNIT: HETERODIMER OF A CATALYTIC (LIGHT) CHAIN AND A MULTIDOMAIN (HEAVY) CHAIN LINKED BY A DISULFIDE BOND.

- SUBCELLULAR LOCATION: Type II membrane protein (Probable).

- ITISSUE SPECIFICITY: INTESTINAL BRUSH BORDER.

- IPTM: THE CHAINS ARE DERIVED FROM A SINGLE PRECURSOR THAT IS CLEAVED BY A TRYPSIN-LIKE PROTEASE.

- IS SIMILARITY: BELONGS TO PEPTIDASE FAMILY SI.

- IS SIMILARITY: CONTAINS 2 LUL-RECEPTOR CLASS A DOMAINS.

- IS SIMILARITY: CONTAINS 1 SEA DOMAIN.

- IS SIMILARITY: CONTAINS 1 SECR DOMAIN.

- IS SIMILARITY: CONTAINS 1 SECR DOMAIN.

- IS SIMILARITY: CONTAINS 1 MAM DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    use by non-profit institutions as long a modified and this statement is not removed. entitles requires a license agreement (See lor send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: RESPONSIBLE FOR INITIATING ACTIVATION OF PANCREATIC PROTECLYTIC PROENZYMES (TRYPSIN, CHYMOTRYPSIN AND CARBOXYPEETIDASE A). IT CATALYZES THE CONVERSION OF TRYPSINOGEN TO TRYPSIN WHICH IN TURN ACTIVATES OTHER PROENZYMES INCLUDING CHYMOTRYPSINOGEN, PROCARBOXYPEPTIDASES, AND PROELASTASES.

CATALYTIC ACTIVITY: Selective cleavage of 6-Lys-1-Ile-7 bond in LYUSINOGEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             s SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the EM European Bioinformatics Institute. There are no restr by non-profit institutions as long as its content
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PROSITE; PS01180; CUB; 2.

PROSITE; PS01209; LDLRA_1; 2.

PROSITE; PS00740; MAM_1; 1.

PROSITE; PS50060; MAM_2; 1.

PROSITE; PS50024; SEA; 1.

PROSITE; PS50024; SEA; 1.

PROSITE; PS50024; SEA; 1.

PROSITE; PS500240; TRYPSIN_DOM; 1.

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se; Zymogen; Transmembrane; Repeat; Alternative sp.
1 800 NON-CATALYTIC CHAIN (HEAVY CHAIN).
1 1035 CATALYTIC CHAIN (LICHT CHAIN).
1 18 CYTOPLASMIC (POTENTIAL).
1 18 SIGNAL-ANCHOR (TYPE-II MEMBRANE PR.
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E207970B08296E13
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RA Addams M.D., Celniker S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfelffer B.D.,
RA Blalew R.M., Basu A., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Broktein P., Brottier P.,
RA Blurtis K.C., Blusam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Bodson K., Deup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Cherry J.M., Cawley S., Dahlke C., Perriera S., Fleischmann W.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Klamel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Nelson D.R., Nelson K.A., Nixon K., Supski M.P., Smith T.,
RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
Ra Williams S.M., Kerlin D.S., Zhan M., Zhang G., Zhao Q., Zheng L.,
RA Zheng Y.-L., Zhong F.N., Zhong W., Zhu X., Zhu X., Smith H.O.,
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P55162; O9VNU8;
01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence up
16-OCT-2001 (Rel. 40, Last annotation up
16-OC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baumgartner S., Martin D., Chiquet-Ehrismann R., Sutton J., Desai A., Huang I., Kato K., Hromas R.; Troteins: a novel family of tissue-specific transmembrane proteins expressed from invertebrates through mammals with an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Hexapoda;
Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera;
Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Membrane-associated protein Hem (Dhem-2).
HEM OR HEM2 OR CG5837.
Droscocki---
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J. Mol. Biol. 251:41-49(1995).
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                                                                                                                              Matches
                                                                            Query Match
Best Local
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.; "The genome sequence of Drosophila melanogaster."; Science 287:2185-2195(2000).
                                                                                                                                                                                                                                                                                                                                                                                                           -!- FUNCTION: PLAY A ROLE DURING GROWTH OF THE OCCYTE.
-!- DEVELOPMENTAL STAGE: EXPRESSED MATERNALY IN THE OCCYTE AND SHOWS
-- UNIFORM EXPRESSION DURING THE FIRST HALF OF EMBRYOGENESIS, BUT
BECOMES RESTRICTED TO THE BRAIN AND THE NERVOUS SYSTEM DURING LATE
                                                                                                                                                                            FlyBase; FBgn0011771; Hem
                                                                                                                                                            Transmembrane
                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                             EMBRYOGENESIS
331 ALMHRERR
                                                                                                                                                                                           X80028; CAA56332.1; -. AE003597; AAF51820.1;
                                                             Similarity 62. 5; Conservative
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A; 129379
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62.5%;
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                                                                                                                            POTENTIAL.
MW; 125FE7177AECC0E5 CRC64;
                                                                            Score 32; DB Pred. No. 67;
                                                             Mismatches
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Search completed: July 11, 2003, 11:55:21 Job time: 1.95634 secs

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Title:
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Listing first 45 summaries
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 SPTREMBL_21:*

1: sp_archea:*
2: sp_bacteria:*
3: sp_fung1:*
4: sp_human:*
5: sp_lnvertebrate
6: sp_manmal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_blage:*
10: sp_plage:*
11: sp_rodent:*
12: sp_vertebrate:
13: sp_vertebrate:
14: sp_urclassifie
15: sp_bacteriap:*
17: sp_archeap:*
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50
1 AVAMMHQERK 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    671580 seqs, 206047115 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                              sp_invertebrate:*
sp_mammal:*
sp_mhc:*
                                                                                                              sp_organelle:*
sp_phage:*
sp_plant:*
sp_vertebrate:*
sp_unclassified:*
sp_rvirus:*
sp_bacteriap:*
sp_archeap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                        671580
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Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and 1s derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	1 3 2		DB	ID	Description
_	41	82.0	380	11	Q920J5	Q920j5 rattus
N	38	76.0	245	Ŋ	Q9NB28	Q9nb28 branchiosto
ω	37	74.0	380	11	Q9D695	Q9d695 mus muscul
4	36	72.0	553	N	Q93AG2	Q93ag2 pseudom
رد د	35	70.0	212	13	042614	042614 cyprinus ca
6	35	70.0	376	ۍ	P91376	P91376 caenorhabdi
7	35	70.0	500	13	Q8UV19	Q8uv19 sphoeroides
8	35	70.0	578	10	023030	023030 arabidopsi
9	35	70.0	602	10	022783	O22783 arabidopsis
10	35	70.0	1561	11	088286	
11	35	70.0	1568	4	095785	095785 homo sapien
12	34	68.0	82	4	Q9Y5U9	Q9y5u9 homo sapien
13	ω A	68.0	82	11	Q9CR20	Q9cr20 mus muscul
14	34	68.0	695	10	Q8W2R3	Q8w2r3 oryza sativ
15	33	66.0	200	10	Q9FU59	Q9fu59 oryza sativ
16	33	66.0	275	16	050755	050755 borrelia

45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
32	32	32	32	32	32	32	3 2	32	32	32	32	32	32	32	ω΄ 22	32	ω ω	ω ω	<u>ω</u>	ω ω	ω ω	ω	33	ယ ယ	ယ	ω ω	ω ω	33
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Q9UIF8	Q9P252	Q91969	Q96TD9	Q9XEM3	Q96SQ8	Q9VNW4	Q8T8Z3	Q9ZGA2	Q56341	Q91278	Q9IB97	Q90ZL9	P71702	Q8YGA5	Q9FZJ8	Q8VWR4	Q9VFI9	Q95TW8	Q91V35	Q95YQ5	Q96KQ6	Q8TE48	Q90231	Q985Z3	Q9U5N7	Q94JB7	Q9RC27	Q8YVK5
homo	Q9p252 homo sapien	Q91969 gallus gall	Q96td9 homo sapien	ω	Q96sq8 homo sapien	Q9vnw4 drosophila		Q9zga2 treponema d	~				P71702 mycobacter1	Q8yga5 brucella me	Q9fzj8 arabidopsis	Q8vwr4 arabidopsis	Q9vfi9 drosophila	Q95tw8 drosophila	Q91v35 mus musculu		Q96kq6 homo sapien	_	Q90231 alligator m	Q985z3 rhizobium l		Q94jb7 oryza sativ	Q9rc27 bacillus sp	Q8yvk5 anabaena sp

ALIGNMENTS

RESULT Q9NB28	Qу	Qu Ma	SQ	DR	DR DR	DR	င္ပ	곧 각	RT	R A	R X	RP	RN	8	8	88) E	ğ	DT	<u> </u>	3 6	RESULT Q920J5	
LT 2	1 AVAMMHQERK 10 204 AVNYMHQERR 213	Query Match 82.0%; Score 41; DB 11; Length 380; Best Local Similarity 80.0%; Pred. No. 1.9; Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;	SEQUENCE 380 AA; 42821 MW; D8076CA8EE2C2FBC CRC64;	PROSITE; PS00284; SERPIN; UNKNOWN_1.	0		-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY.	mesangioproliferative nephritis."; Kidney Int. 60:641-652(2001).	"Cloning of rodent megsin revealed its up-regulation in	Yaqi M., Naqano N., Inaqi R., Kurokawa K.;		SEQUENCE FROM N.A.		•	Rodentia; Sciurognathi; Muridae;	Eukarvota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		2002 (TrEMBLrel.	(TrEMBLrel. 19,	01-DEC-2001 (TrEMBLrel. 19, Created)		UT 1 15 O920J5 PRELIMINARY: PRT: 380 AA.	

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RESULT 3
Q9D695
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                                                                                                                                           Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

A Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,

A Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

A Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,

Bakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

Blake J., Boffelli D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,

Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,

Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,

Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,

Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,

Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local :
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01-JUN-2001 (T:
01-JUN-2002 (T:
4631416M05Rik
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HOlland L.Z., Schubert M., Holland N.D., Neuman T.;
"Evolutionary conservation of the presumptive neural
Amphisox1/2/3 and AmphiNeurogenin in the invertebrat
amphisoxu.";
Dev. Biol. 0:0-0(2000).
EMBL; AF271787; AAF81765.1; -.
HSSP; Q05066; 1HRY.
InterPro; IPR000135; Highmoblty_12.
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-DCC-2001 (TrEMBLrel. 19, Last annotation update)
1MG box transcription factor AmphiSox1/2/3.
Branchiostoma floridae (Florida lancelet) (Amphioxus):
Eukaryota; Metazoa; Chordata; Cephalochordata; Branchiostomidae;
                                                                                                                   Wynshaw-Boris A., Yoshida
Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., E Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yan Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-C57BL/6J; TISSUE-SKIN; . MEDLINE-21085660; PubMed-11217851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4631416M05Rik protein (Megsin).
SERPINB7 OR 4631416M05RIK.
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SMART; SM00398; HMG; 1.
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Nature 409:685-690(2001).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q9D695;
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                                                                           "Functional annotation of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=7739;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TrEMBLrel. 17, Created)
(TrEMBLrel. 17, Last sequence update)
(TrEMBLrel. 21, Last annotation update)
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Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28158 MW;
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                                                                               full-length mouse cDNA collection.";
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Pred. No.
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5.2;
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S., Yamanaka
Saito
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amanaka I.,
Saito R.,
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MGD; MGI:2151053; Serpinb7.
InterPro; IPR000215; Serpin
Pfam; PF00079; Serpin; 1.
SMART; SM00093; SERPIN; 1.
042614;
042614;
01-JAN-1998
01-JAN-1998
01-DEC-2001
                                                                                                                                                                                                                 Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases EMBL; AF421356; AAL16082.1; ... InterPro; IPR000733; Flav_monooxygnse. InterPro; IPR002938; Moxy_FAD_binding. InterPro; IPR0002938; Moxy_FAD_binding. InterPro; IPR000594; ThiF_domain. Pfam; PF01194; FAD_binding_3; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q93AG2;
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mesangioproliferative nephritis."; Kidney Int. 60:641-652(2001). EMBL; AK014524; BAB29410.1; -.
                                                                                                                                                                                     Monooxygenase
SEQUENCE 553
                                                                                                                                                                                                                                                                                             degrade chloranilic acid
quinone).";
                                                                                                                                                                                                                                                                                                    Trevino-Quintanilla L.G., Soberon-Chavez G.; "Isolation and characterization of a Pseudomonas putida strain able degrade chloranilic acid (2,5-dichloro-3,6-dihydroxy benzo-1,4-
                                                                                                                                                                                                                                                                                                                                                                                                                                    01-DEC-2001
01-JUN-2002
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                                                                                                                                                                                                                                                                                                                                      STRAIN-TQ07
                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=303;
                                                                                                                                                                                                                                                                                                                                                                                         Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                      Pseudomonas
                                                                                                                                                                                                                                                                                                                                                                                                                          FAD-monooxygenase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00284; SERPIN; UNKNOWN_1
SEQUENCE 380 AA; 43050 MW; C924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yagi M., Nagano N., Inagi R., Kurokawa K.; "Cloning of rodent megsin revealed its up-regulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE=21368006; PubMed=11473647;
Nangaku M., Miyata T., Suzuki D., Umezono T., Hashimoto T.,
                                                                G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity res 7; Conserv
                                                                                                 369
                                                                                                                                                                                                         PF01494;
PF01360;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   205
                                                                                                                                          1 Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 VAMMHQERK
                                                                                                 AVAVMHQRR
                                                                                                                    AVAMMHQER
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(TrEMBLrel.) (TrEMBLrel.)
                                                                                                                                                                                      553
                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                     putida.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                            PRELIMINARY;
                                                                                                                                                                                     AA;
                                                                                                                                                                                                        Monooxygenase;
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                                                                                                                                                                                     61430 MW;
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                                                                                                                                                    72.0%;
77.8%;
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21,
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Created)
Last sequence update)
Last annotation update)
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Last annotation updat
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                                                                                                                                                     Score 36;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                     54BB707D639E0C6E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C9240272BCFB9CF4 CRC64;
                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           subdivision; Pseudomonadaceae;
                                            212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB
13;
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31;
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                                                                                                                                                              Length 553;
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Best Local S
Matches
                   InterPro; IPR000719; Euk_pkinase.
InterPro; IPR000719; Ser_thr_pkinase.
Pfam; PF00069; pkinase; I.
ProDom; PP0000001; Euk_pkinase; 2.
SMART; SM00220; S_TKc; 1.
PROSITE; PS50011; PROTEIN_KINASE_DOM; 1
Hypothetical_protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Actinopterygii; Neopterygii; Teleostei; Cyprinidae; Cyprinus.
NCBI_TaxID=7962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P91376;
P91376;
01-MAY-1997
01-MAR-2002
01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
EMBL;
HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN-BRISTOL N2; MEDLINE-99069613;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda;
Rhabditidae; Peloderinae; Caer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical 42.4 K11H12.9.
                                                                                                                                                                                                                                           "Direct Submission.";
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases
EMBL; U88168; AAC24403.2; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                None;
                                                                                                                                                                                                                                                                                                                                              Waterston R.;
                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "The sequence of C. Submitted (FEB-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bradshaw H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   *Genome sequence of the nematode C. elegans: a platform for investigating biology. The C. elegans Sequencing Consortium. Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID-6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     racey A.Y., Colonna-Romano S., Tiku P.E. ubmitted (JUL-1997) to the EMBL/GenBank I- SIMILARITY: BELONGS TO THE SERPIN FA MBL; AF006495; AAB61755.1; -- MBL; AF006494; AAC19409.1; -- MBL; AF006494; ABC19409.1; -- MBL; AF006494; -- MBL; AF00649494; -- MBL; AF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fam; PF00079; serpin; 1.
MART; SM00093; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VAMMHQERK 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VPMMYQERK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 (TrEMBLrel. 03, (22 (TrEMBLrel. 20, ) 2 (TrEMBLrel. 21, )
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   376 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     kDa protein.
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) to the
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   42391 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oda; Chromadorea;
Caenorhabditis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cosmid k11H12.";
EMBL/GenBank/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
   60F460A4685000F8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7F185103CF8BAFF0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          376 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vertebrata; Euteleostomi;
Ostariophysi; Cypriniformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Maresca
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Q8UV19
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Best Local S
Matches
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SEQUENCE FROM N.A.

STRAIN-CV. COLUMBIA;

Osborne B.I., Vysotskaia V.S., Toriumi M., Yu G., Oji O., Liu S.

Li J., Hoang L., Buehler E., Conway A.B., Conway A.R., Dewar K.,

Feng J., Kim C., Kurtz D., Li Y., Shinn P., Sun H., Davis R.W.,

Ecker J.R., Federspiel N.A., Theologis A.;

"The sequence of BAC TIGII from Arabidopsis thaliana chromosome

Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                            T1G11.21
T1G11.21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=21096913; PubMed=11157800;
Flint J., Tufarelli C., Peden J., Clark K., Daniels
Miller W., Philipsen S., Tan-Un K.C., McMorrow T., F
Alter B.P., Frischauf A.M., Higgs D.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sphoeroides nephelus.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08UV19;
                                                                                                                                                                                                                                  Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta,
Spermatophyta; Magnoliophyta; eudicotyledons; core e
eurosids II; Brassicales; Brassicaceae; Arabidopsis
                                                                                                                                                                                                                                                                                                                                                                    O23030;
01-JAN-1998 (TrEMBLrel.
01-JAN-1998 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence
01-JUN-2002 (TrEMBLrel. 21, Last annotati.
Hypothetical 63.6 kDa protein (Fragment).
                                                                                                                                                                                                                                                                                                     Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               identifies key regulatory elements Hum. Mol. Genet. 10:371-382(2001). EMBL; AV016023: AAL73050.1; -. InterPro; IPR005365; UPF0171. Pfam; PF03666; UPF0171; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE=21096913;
                                                                                                                                                                                                           NCBI_TaxID=3702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 023030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tetraodontidae; Sphoeroides
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Pred. No.
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RESULT 10
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Best Loc
Matches
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Submitted (OCT-1997) to the ENEMBL; AC002376; AAB80639.1;
InterPro; IPR000008; C2:
Pfam; PF00168; C2; 1.
SMART; SM00239; C2; 1.
088286
088286;
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eueurosids II; Brassicales; Brassicancae: *---''.
                                                                                                                                                                                                                                                                                 Lin X., Kaul S., Rounsley S.D., Shea T.P., Benito M.-I., Town C.D., Fujii C.Y., Mason T.M., Bowman C.L., Barnstead M.E., Feldblyum T.V., Buell C.R., Ketchum K.A., Lee J.J., Ronning C.M., Koo H., Moffat K.S., Cronin L.A., Shen M., Vanaken S.E., Umayam L., Tallon L.J., Gill J.E., Adams M.D., Carrera A.J., Creasy T.H., Goodman H.M., Somerville C.R., Copenhaver G.P., Preuss D., Nierman W.C., White O., Eisen J.A., Salzberg S.L., Fraser C.M., Venter J.C.;
                                                                                                                                                                                                                                                                                                                                                     STRAIN-CV. COLUMBIA;
MEDLINE-20083487; PubMed=10617197;
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01-JAN-1998 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
At2933320 protein.
                                                                                                                                                                         Pfam;
                                                                                                                                                                                            EMBL;
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                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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SEQUENCE FROM N.A
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                                                                                                                                                                                                                                                      Nature 402:761-768(1999).
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Pro; IPR000008; C2.
PF00168; C2; 1.
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                                                                                                                                                              SM00239;
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(TrEMBLrel.
                     PRELIMINARY;
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Pred. No.
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                                                                                                                               Length 602;
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                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                           Tracheophyta;
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Matches
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MGD; MGI:1332638; Wiz.
Interpro; IPR00082; Znf_C2H2.

Pfam; PF00096; Zf-C2H2; 10.

PRINTS; PR00048; ZINCFINGER.

SMART; SM00355; ZnF_C2H2; 10.

PROSITE; PS00028; ZINC_FINGER_C2H2_1; 8.

PROSITE; PS00028; ZINC_FINGER_C2H2_2; 7.

DNA-binding; Metal-binding; Nuclear protein; Zi
SEQUENCE 1561 AA; 171243 MW; 8A0130A7B5374C
                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.

Lamerdin J.E., McCready P.M., Skowronski E., Viswanathan V.,

Burkhart-Schultz K., Gordon L., Dias J., Ramirez M., Stilwagen:

Burkhart-Schultz K., Gordon L., Regala W., Terry A., Garnes J.,

Phan H., Velasco N., Do L., Regala W., Terry A., Garnes J.,

Danganan L., Erler A., Christensen M., Georgescu A., Avila J.,

Danganan L., Erler A., Christensen M., Georgescu A., Avila J.,

Attix C., Andreise T., Trankhelm M., Amico-Keller G., Coeffeld

Duarte S., Lucas S., Bruce R., Thomas P., Quan G., Kronmiller B

Arellano A., Sanders C., Ow D., Nolan M., Trong S., Kobayashi A

Olsen A.S., Carrano A.V.;

Sequence analysis of a 3.5 Mb region in 19p13.1 between OLFR at

JUND."
                                       Burkhart-Schultz K., Gordon L., Dias J., Brower A., Ramir Stilwagen S., Phan H., Velasco N., Do L., Regala W., Terr Garnes J., Danganan L., Erler A., Christensen M., Georges Avila J., Liu S., Attix C., Andreise T., Trankheim M., Amico-Keller G., Coefield J., Duarte S., Lucas S., Bruce
  Thomas
Nolan 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAY 1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Human homolog of MUS MUSCULUS WIZL protein (Human h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                 SEQUENCE OF 783-1568
Lamerdin J.E., McCrea
                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                           Submitted
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"Molecular Cloning and Distinct Developmental Expr."

Spliced Forms of A Novel Zinc Finger Gene wiz in T.

Submitted (MAR-1998) to the EMBL/GenBank/DDBJ data!

-!- SUBCELLULAR LOCATION: NUCLEAR (BY SIMILARITY).
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Mammalia; Eutheria;
NCBI_TaxID=10090;
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01-MAR-2002
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                                                                                                                                                                                                                                        (MAR-1999) to
Quan G.,
Trong S.,
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etazoa; Chordata;
theria; Rodentia;
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                                                                                                                                                                 3-1568 FROM
McCready P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata;
Primates;
Kronmiller B.,
Kobayashi A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 35;
                                                                                                                                                                 Skowronski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ear protein; Zinc-finger
8A0130A7B5374CF6 CRC64;
    Olsen
                      Arellano A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.
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                                                                                                                                        J., Brower A., Ramirez M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.4e+02;
ches 1;
                                                                                                                                                                   E., Viswanathan V.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11;
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Sanders C., arrano A.V.;
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                                                                                              Georgescu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The Cerebellum.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Euteleostomi;
                                                                                                                 Terry A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pattern
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B.,
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RESULT
Q9Y5U9
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Best Local S
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
HSPC039 protein (Hypothetical 9.0 kDa protein) (Immediate early response 3 interacting protein) (Similar to HSPC039 protein).
DKF2P564B1471.
                                                                                                                                                                                                                                                                                                    Wiemann S.
Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AC007059; AAD19818.1;
EMBL; AC006128; AAC97985.1;
EMBL; AC007059; AAD19817.1;
InterPro; IPR000822; Znf_C21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalla: Eutheria; Primates;
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Interpro; IPRO00822; Znf_C2H2.

Pfam; PF00096; zf-C2H2; 10.

SMART; SM00355; ZnF_C2H2; 10.

PROSITE; PS00028; ZINC_FINGER_C2H2_1;

PROSITE; PS50157; ZINC_FINGER_C2H2_2;
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p198885.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ye M., Zhang Q., Zhou J., Shen Y., G
Dal M., Huang Q., Chen S., Chen Z.;
"Human HSPC039 mRNA, complete cds.";
Submitted (FEB-1999) to the EMBL/Gen
Strausberg R.;
                                                                                                                                                                     Submitted
                                                                                                                                                                                                                                                                  SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                              Bloecker H., Boecher Wiemann S.;
                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                               Huang C., Zhang C., Wu T.
Han Z., Wang Y., Chen Z.,
"A novel gene expressed in
"Submitted (JUL-1999) to t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-ADRENAL GLAND;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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                                                                           Submitted
                                                                                                                               SEQUENCE FROM
                                                                                                                                                                                                                                            TISSUE-LIVER;
                                                                                                                                                                                                                                                                                                                                                              TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NON_TER
                                   SEQUENCE FROM N.
                                                                                                                                                                                         "Characterization
(IERIP).";
                                                                                                               TISSUE-BRAIN;
             CISSUE-MYELOID
                                                                                                                                                                                                                            ₩. H.,
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6; Conserv
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                                                                         (JUL-2001)
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                                                                                                                                                                                                                                                                                                        (JAN-2000)
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               LEUKEMIA CELLS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 619
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                                                                                                                                                                                                                                                                                                                                                                                                                                       in human adrenal gland.";
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Fu G.;
                                                                                                                                                                                                                          K.P.
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                                                                         EMBL/GenBank/DDBJ databases
                                                                                                                                                                     EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                        EMBL/GenBank/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 35; DB 4;
Pred. No. 1.4e+02;
3; Mismatches 1
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                                                                                                                                                                                                    early
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G
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                                                                                                                                                                                                                                                                                                                                            H.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gu W.,
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                                                                                                                                                                                                    S.K.W., Waye interacting
                                                                                                                                                                                                                                                                                                                                            Gassenhuber
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                                                                                                                                                                                                                          Waye M.M.Y.;
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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kitischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.
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Q9CR20
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Best Local S
Matches
                                                                                                                     Submitted (JAN-2002) to the EMBL/
EMBL; AK009116; BAB23248.1; -
EMBL; AK004281; BAB23248.1; -
EMBL; AK007388; BAB25005.1; -
EMBL; AK007362; BAB25314.1; -
EMBL; AK007862; BAB25314.1; -
EMBL; BAB25314.1; -
EMBL; BC021512; AAH21512.1; -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
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01-JUN-2001 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
1110057H19Rik protein (R
                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                          Strausberg R.
                                                                                                                                                                                                                                                                                                                                                                                                                  Wynshaw-Boris A
Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=21085660; PubMed=11217851;
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                                                                                                                                                                                                                                                                                                                                                                      Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                           "Functional annotation of a full-length mouse
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                                                                                                                                                                                                                                                                                                                      EQUENCE FROM N.A.
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AF164798; AAF80762.1;
AL136667; CAB66602.1;
AR371963; AAK53816.1;
BC010888; AAH10888.1;
BC017391; AAH17391.1;
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(TrEMBLrel. 17,
(TrEMBLrel. 20,
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Last annotation update)
N cDNA 1110057H19 gene).
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Sciurognathi; Muridae;
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                         NO ;
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Q8W2R3; Q8W2R3;

PRELIMINARY;

PRT;

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Best Local S
Matches 6
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01-MAR-2001 (TrEMBLrel. 16, C.
01-MAR-2001 (TrEMBLrel. 16, L.
01-MAR-2001 (TrEMBLrel. 16, L.
P0013F10.15 protein.
P0013F10.15.
SEQUENCE FROM N.A.
STRAIN=CV. NIDPONBARE;
Sasaki T., Matsumoto T., Yamamoto K.;
"Oryza sativa nipponbare(GA3) genomic clone:P0013F10.";
                                                                                                                                                          Oryza sativa (Rice).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Ehrhartoideae; Oryzeae; Oryza.

MCBI_TaxID-4530;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00010; ASX_HYDROXYL; UNKNOWN_1.
PROSITE; PS01187; EGF_CA; UNKNOWN_1.
PROSITE; PS00107; PROTEIN_KINASE_ATP; UNKNOWN_1.
PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
PROSITE; PS00108; PROTEIN_KINASE_ST; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AC098565; AAL69427.1; -
InterPro; IPR000152; Ashydroxyl.
InterPro; IPR000561; EGF-1ike.
InterPro; IPR001881; EGF_Ca.
InterPro; IPR000719; Euk_pkinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oryza sativa (Rice).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProDom; PD000001; Euk_pkinase; 1.
SMART; SM00001; EGF_like; 2.
SMART; SM00220; E_TKC; 1.
SMART; SM00219; TyrKC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPRO
Pfam; PF00069;
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Wing R.A., Yu Y., Soderlu
Wing R.A., Henry D., Oates
"Rice Genomic Sequence.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Putative wall-associated protein kinase.
05JNBA0028C16.9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9FU59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382 MMHQKRK 388
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                         DNA,
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                            chromosome
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                                                                                     Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases EMBL; AP002523; BAB17069.1; -. SEQUENCE 200 AA; 22103 MW; 01D469471C059FDB CRC64;
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| 138 AVAIQHQEQE 147
          1 AVAMMHQERK
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Result
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1959
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Listing first 45 summaries
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*
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AAG64286
AAY08255
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AAB83076
AAB824151
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Human megakaryocyt
Human megsin prote
Human megsin prote
Human megsin protein
Rat megsin protein
Rat megsin protein
Rat megsin protein
Rat megsin protein
Mouse megsin prote
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Sequence of human Sequence of plasmi Encodes Plasminoge	73 16 92	9 10 12	415 415 415	333 33.9	664.5 664.5
Human novel Plasminogen	AAU16928 AAR12143	22 12	340 392		672.5 671
₽.	AAR12144	12	382		
	828	22	617		690
_	AAY72652	22	400	35.8	702
	Çī,	21	391	•	714.5
Human serine	095	21	391		714.5
_	592	20	391	•	714.5
_	ABB74947	23	400		715
Human lung	AAB11315	21	400		715
Human lung	AAY41030	20	400	•	.715
Human lung	ABB74946	23	391	•	715.5
Human head	AAY72651	22	391		715.5
Human lung	AAB11314	21	391		715.5
Human lung	AAY41029	20	391		715.5
-	AAR64159	16	379	•	717.5
_	AAB43755	21	437	•	722.5
Human elastase	AAR94367	17	379		722.5
Human prostate	AAY15156	21	617		38
Psoriastatin	AAW15241	18	390	•	740
Ω	AAW15242	18	390	•	744
Human squamous ce	265	22	390		748
Human SCCA2	AAY25927	20	390		748
Hepatitis	AAY32078	20	390		750
Human squamous ce	26	22	390	•	752
Human SCCA1	CD.	20	390	.38.4	752
Hepatitis	AAY32077	20	390		752
SCC antigen	AAR25276	13	390		752
Human polypeptide	ABB53280	23	394	•	769
	20	22	395	•	71
D	AAY15155	21	379	40.7	796.5
Murine megsin	AAB83077	22	368	74.4	1458

ALIGNMENTS

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RESULT 1
AAR48379
ID AAR4
XX AAR4
XX AAR4
XX Huma
XX Huma
XX Huma
XX Huma
XX Homc
XX H
                                                                                                                   Ishida N, II
Tsujimoto M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-AUG-1994 (first entry)
WPI; 1994-058782/08.
N-PSDB; AAQ56670.
                                                                                                                                                                                                                                                                                                                                                                           17-JUL-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EP583884-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human megakaryocyte differentiation factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR48379;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR48379 standard; Protein; 380 AA.
                                                                                                                                                                                                                                                   (SUNR ) SUNTORY LTD. (TSUJ/) TSUJIMOTO M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-FEB-1994.
                                                                                                                   Iwasa F, Ku
M, Tsuruoka |
                                                                                                                                                                                                                                                                                                                                                                       92JP-0212305
93JP-0067339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93EP-0305654
                                                                                                                                                                  Kurihara T,
                                                                                                                                z
                                                                                                                            Yamaguchi N, Yamaichi K;
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RESULT 2
AAV08254
ID AAY1
XX AAY1
XX AAY1
XX AAY1
XX AAY1
XX AAY1
XX Huma
XX Huma
XX Huma
XX Homa
XX H
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Best Local Similarity
Matches 380; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human MDF can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietin making it useful for treatment of diseases involving a decrease in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55-57kD by SDS-PAGE and exhibits an isoelectric point of 6.0-7.0.
                                                                                                                                                                                                                                                                                        Human megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
    22-SEP-1997;
                                                                                       01-APR-1999
                                                                                                                                WO9915652-A1
                                                                                                                                                                                                                                                                                                                                   14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                               AAY08254;
                                                                                                                                                                                                                                                                                                                                                                                                                        AAY08254 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New megakaryocyte different epidermoid carcinoma cells,
                                             22-SEP-1998;
                                                                                                                                                                              Homo
                                                                                                                                                                                                                       human;
                                                                                                                                                                                                                                              Megsin;
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                                                                                                                                                                                                                   mesangial cell;
rat; murine.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGGINMYVL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ξ,
                                             98WO-JP04269
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                                                                                                                                                                                                                                                                                                                                                                                                                        Protein;
                                                                                                                                                                                                                                                                                                                                 entry)
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                                                                                                                                                                                                                                            diagnosis;
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1.6e-169;

    isolated from
conditions invo

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                                                                                                                                                                                                                                          IgA nephropathy;
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RRESULT 3
AAB24142
II. AAB2
II. AAB2
XX AAB2
AC AAB2
XX 30-J
DI 30-J
XX W19A;
KW Megs
KW 19A;
KW 19A;
KW diag
XX W19A;
X
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Best Local S
Matches 380
                                                                                                                                Megsin; mesangium-predominant gene; IgA; immunoglobulin A; detection; rediagnosis; biological sample; blood;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes the isolation of novel megsin nucleic acid a proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangia cells, such as IgA nephropathy.
                                                                                                                                                                                                                       Human megsin
                                                                                                                                                                                                                                                                                                                                                            AAB24142
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N-PSDB; AAX56712.
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                                                                                                                                                                                                                                                                     30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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MIYATA T.
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                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                            Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsin protein, which is given in the exemplification of the present invention.
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(FUSO ) FUSO PHARM
(MIYA/) MIYATA T.
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Matches 280
                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a novel antibody which recognises a peptide consisting of residues 341-354 of rat megsin protein. The present sequence is the protein sequence for rat megsin, which was used in the present invention. Mesgin is highly expressed in renal mesangial cells and its level is elevated in mesangium proliferative nephritis. Assay of the serum or urine level using the antibody is therefore indicative of
                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 54-56; 63pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miyata
                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antibody recognizing a partial sequence of diagnosis of mesangium proliferative nephritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200148019-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rat megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAG64286;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAG64286 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-SEP-2001
                                                                                                                                                                                                                                                                                                                                                 serum or urine level using 
s type of disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          megsin; renal mesangial
                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001-425651/45.
DB; AAH48181.
             301
                                                                                                          181
                                                                                                                                   121
                                                                                                                                                          121
                                                                                                                                                                                                                                                                              280;
                                                                                                                                                                                 61
                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                          Similarity
                                  LYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYFKGK
             DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
                                                                                  WKSAFTKSDTLSCHFRSPSGPGKAVNMMHQERRFNLSTIQEPPMQILELQYHGGISMYIM
                                                                                              WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGGINMYVL
                                                                                                                                 LYNAKVERVDFTNDIQETRFKINKWIENETHGKIKKVLGDSSLSSSAVMVLVNAVYFKGK
                                                                                                                                                                                ISPSRQGNSSNSQLGLQYQLKRVLADINSSHKDYELSIANGVFAEKVFDFHKSYMECAEN
                                                                                                                                                                                           NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK
                                                                                                                                                                                                                             {\tt MASLAMANAEFGFDLFREMDSSQGNGNVFFSSLSIFTALSLIRLGARGDCARQIDKALHF}
                                                                                                                                                                                                                                          MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
380
                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000WO-JP09251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                           ΑA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99JP-0373677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                           76.0%; Score 1488; I
73.7%; Pred. No. 2.16
tive 57; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cell; mesangium proliferative nephritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
                                                                                                                                                                                                                                                                                      ..1e-1
                                                                                                                                                                                                                                                                                                   DB
                                                                                                                                                                                                                                                                            22;
126;
43;
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                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 megsin
                                                                                                                                                                                                                                                                                                   380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                     Query Match
Best Local S
Matches 279
                                                                                                                                                                                                                                                                                               This invention describes the isolation of novel megsin nucleic acid; proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangia
                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 69-72; 100pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                           Megsin
                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-276983/23
N-PSDB; AAX56712.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Miyata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY08255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY08255
                                                                                                                                                                                                                                                                                      cells,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rat megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (KURO/) KUROKAWA
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Megsin;
 241
                     241
                                                                 181
                                                                                      121
                                           181
                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                  61
                                                                                                                                                       61
                                                                                                                                                                                                                      l Similarity
279; Conserv
                                                                                                                                                                            Н
                                                                                                                                                                                                                                                                                                                                                                           protein expressed specifically in
                                                                                                                                                                                                                                                                                      such as IgA nephropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mesangial cell;
LPENDLSEIENKLTFQNLMEWTNPRRWTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIF
                                                      WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGGINMYVL
                                                                                                  LYDAKVERVDETNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYFKGK
                                                                                                                                 ISPSRQGNSSNSQLGLQYQLKRVLADINSSHKDXKLSIANGVFAEKVFDFHKSYMECAEN
                                                                                                                                                                           MASLAAANAEFGFDLFREMDSSQGNGNVFFSSLSIFTALSLIRLGARGDCXRQIDKALHF
                                                                                                                                                                                       MASLAAANAEFCENLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                            WKSAFTKSDTLSCHFRSPSGPGKAVNMMHQERRFNLSTIQEPPMQILELQYHGGISMYIM
                                                                                     LYNAKVERVDFTNDIQETRFKINKWIENETHGKIKKVLGDSSLSSSAVMVLVNAVYFKGK
                                                                                                                                              NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FLFVIRKNGIILFTGKVSCP 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FLFVIRKDDIILFSGKVSCP 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VESRADLSGIASGGRLYVSKLMHKSLIEVSEEGTEATAATESNIVEKLLPESTVFRADRP 360
                                                                                                                                                                                                                                                                  380
                                                                                                                                                                                                                    75.4%; ilarity 73.4%; Conservative 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 murine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-JP04269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  380
                                                                                                                                                                                                                     Score 1477; DB 20;
Pred. No. 2e-125;
6; Mismatches 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosis; disease;
                                                                                                                                                                                                                                                                                                                                                                           mesangial cells
                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                               involving mesangial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IgA nephropathy;
                                                                                                                                                                                                                                            380;
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                     300
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RESULT 7
AAB24150
ID AAB2
XX AAB2
XX AAB2
XX AAB2
XX AAB2
XX AAB2
XX AAG2
XX AG4
DT 30-J
DT 30-J
XX Hegs
KW 19A;
KW 19A;
KW 19A;
KW 19A;
KW 19A;
KW 19A;
FT M1s;
FT M1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
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  Query Match
Best Local S
Matches 279
                                                                                                                                   The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegain protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegain protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the rat megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND LTD
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB24150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB24150 standard; Protein; 380
                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Evaluating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miyata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-MAR-2000; 2000WO-JP01646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-SEP-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rat megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001
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    1 Similarity
279; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAC55238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FLFVIRKNGIILFTGKVSCP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             renal function
                                                                                                                                                                                                                                                                                                                                                                                                                          Page 81-84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
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    Conservative
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99JP-0306623
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                        75.48;
                                                                                                                                                                                                                                                                                                                                                                                                                          93pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "unspecified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              comprises
    56;
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  Score 1477; DB 2
Pred. NO. 2e-125;
6; Mismatches 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              assaying
                                           DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           megsin
    45;
                                              Length
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein
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Gaps
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RESULT 8
AAB830A
XX AAB83
XX AAB8
XX AAB8
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XX AAB8
XX Rat;
XX Rat;
XX Rat;
XX Rat;
XX Cac
PN W020
PN W0
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N-PSDB;
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transgenic mo
                                                                                                                                                                                                                                                                                                                                                                                                                Miyata
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           (KURO/) KUROKAWA
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-APR-2001
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)B; AAF82439.
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mouse; glomerular disease; animal model; drug screening
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sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is usefur for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using

The present sequence is rat megsin. The human megsin

coding

model of

useful

62pp; Japanese.

Disclosure; Page 48:50;

Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments \cdot

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RRESULT 9
AAVOBEZ 6
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Best Local Similarity
Matches 279; Conserv
                                           WPI; 1999-276983/23.
N-PSDB; AAX56714.
                                                                                                         Miyata T;
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  Megsin
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                                                                                                                                                (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Megsin; mesangial cell; treatment; diagnosis; disease; IgA nephropathy; human; rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse megsin
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specifically in mesangial
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Pred. No. 2e-125;
66; Mismatches 4
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RESULT 10
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DT 30-JA
DT 30-JA
C Mouse
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KW IGA;
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KW C GISC
PA (KURC
PA (KURC
PA (MIYA
XX MIYA

WO200057189-A1 Mus musculus.

28-SEP-2000

Megsin; mesangium-predominant gene; IgA; immunoglobulin A; detection; rediagnosis; biological sample; blood;

blood;

urine

renal function; renal disorder;

Mouse megsin

sequence

SEQ ID

NO:21

30-JAN-2001 AAB24151;

(first entry) protein

AAB24151 standard; Protein;

368

19-MAR-1999; 28-OCT-1999;

99JP-0075305 99JP-0306623

(KURO/) KUROKAWA K. (FUSO) FUSO PHARM IND LTD (MIYA/) MIYATA T.

17-MAR-2000; 2000WO-JP01646

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                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 76-79; 100pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                     Local Similarity 73.4 tes 270; Conservative
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                                              LTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIFDESKADLSGIAS 312
                                                                                                                                                             CHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGGINMYVLLPENDLSEIENK 252
                                                                                                                                                                                                   NDVQDTRFKINKWIENETHGKIKKVLGDSSLSSSAVMVLVNAVYFKGKWKSAFTKTDTLS
                       FSGKVSCP 380
                                                                                                                                                 CRFRSPTCPGKVVNMMHQERRFNLSTTQQPPMQVLELQYHGGTSMYIMLPEDGLCETESK
                                                                                                                                                                                                               NHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYFKGKWQSAFTKSETIN 192
FTGKVSCP
                                                                                                  LSFQNLMDWTNRRKMKSQYVNVFLPQFKIEKNYEMTHHLKSLGLKDIFDESSADLSGIAS
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Best Local Simi
Matches 270;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the mouse megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                  10-JUL-2001
                                                                                                                                                                                                                                                                                                                                 AAB83077 standard;
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transgenic mouse;
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DB; AAC55239.
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se; glomerular disease; animal model; drug screening.
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Pred. No. 1e-123;
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                          07-FEB-2000
                                                                            AAY15155;
                                                                                                                           AAY15155
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N-PSDB; AAF82440.
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(MIYA/) MIYATA T.
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Pred. NO. 1e-123;
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                                                                                                                  Query Match
Best Local
                                                                                                                                                                                           serine protease inhibitor (serpin) family and expressed in normal prostate and locally confined prostate cancer. The sequence is derived from overlapping sequences of human cDNA clones IIP2A6 and 103. PROSTAPIN contains a reactive-site loop characteristic of serpin family in the carboxy-terminal region. The protein may function as a prostate-specific tumour suppressor, apoptosis-inducer or apoptosis-modulator. The sequence is useful in diagnosing, prognosing, monitoring and treating prostate cancer, particularly advanced stage and metastatic
                                                                                                                                                                                                                                                                                                                             Claim 1; Fig 1;
                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                      New isolated prostapin gene, used treating and determining susceptil
                                                                                                                                                                                                                                                                                                                                                                                                                                     Afar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09958560-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cleavage-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                     The present sequence is that of a PROSTAPIN protein which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AFAR/)
(HUBE/)
(LEON/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAR-1998;
15-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-NOV-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  metastatic prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               apoptosis-modulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSTAPIN; serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SAFF/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UROG-) UROGENESYS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Inhibitory-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prostate-specific
                                                                                                                                                                                                                                                                                                                                                                                                           2000-039068/03
                                                                                                                                                                                                                                                                                                                                                                                                                                   DE, Hubert RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                        168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prostate
  61
                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ) AFAR D E.
) HUBERT R S.
) LEONG K.
) RAITANO A B.
) SAFFRAN D C.
                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                               AAZ29049
SHTVDSLKPGFKDSPKCSQAGRIHSEFGVEFSQINQPDSNCTLSIANRLYGTKTMAFHQQ
                                                                 MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                                                                                                                   prostate cancer, cancer.
                        ----NTASGYGNSSN-SQSG-LQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKD 113
                                                   MGSLSTANVEFCLDVFKELNSNNIGDNIFFSSLSLLYALSMVLLGARGETAEQLEKVLHF
                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0080167
98US-0085720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US07123.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   serine
                                                                                                                                                                                                                                                                                                                             63pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /label= RSL_hinge_region
/note= "confers stability to the serpin-protease
complex and is highly conserved among the serpin-
344.345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers 330..347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              contains a hinge region and a variable region. R
binds to protease active site during inhibition"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     undergoes cleavage at this site during
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= Serine_protease_inhibitory_domain
/note= "Also known as reactive-site loop (RSL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protease inhibitor; serpin family; prostate; human;
tumour suppressor; apoptosis-inducer; diagnosis;
                                                                                                                  40.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              prognosis; treatment; prostate cancer;
                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protease inhibitor (PROSTAPIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                  Leong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "included in the
                                                                                                                                                                                                                                                                                                                                                    sne, used to develop products for, e.g.
susceptibility to prostate cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                   7,
                                                                                                    Pred. No. 1.2e-63; 7; Mismatches 120
                                                                                                                              Score 796.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Raitano
                                                                                                                                                                                                                                                                                                                                                                                                                                   AΒ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RSL variable region
                                                                                                                              DB 21;
                                                                                                     120;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Saffran
                                                                                                     Indels
                                                                                                                              Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inhibition"
                                                                                                                               379;
                                                                                                                                                                                                                                                                                                  is a member of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           serpins"
                                                                                                     29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSTAPIN
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                                                                                                    Gaps
                                                                            60
                                                   60
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RESULT 13
AAM47207
ID AAM47
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                                                                                                                                                                                                                                                                                                                                                                  Human; NOV1; metabolic disorder; neurodegenerative disorder; hammune disorder; haematopoletic disorder; developmental disease; cancer retinal disease; feeding disorder; vaccine; infection; gene therapy; neurological disorder; psychotic disorder; G-protein coupled receptor; cytostatic; antidiabetic; virucide; neuroprotective; nootropic; analgesic; antidiabetic; antidigraine; anticonvulsant; neuroleptic; antiasthmatic; antiallergic; antifinamatory; anorectic; antiarthritic antiasthmatic; antiatherosclerotic; antibacterial; fungicide; osteopathic; protozoacide; antiulcer; hypertensive; hypotensive; antiinfertility; vulnerary; nephrotropic; antilipemic; leupin;
                     N-PSDB;
                                 WPI; 2001-626379/72
                                                         Shimkets
                                                                   Majumder
                                                                                                                                                                                                  05-APR-2000;
06-APR-2000;
                                                                                                                                                                                                                          30-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAM47207 standard;
                                                                                                                 14-APR-2000;
29-MAR-2001;
                                                                                                                                         13-APR-2000;
14-APR-2000;
                                                                                                                                                                 10-APR-2000;
11-APR-2000;
                                                                                                                                                                                        06-APR-2000;
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                                                                                                                                                                                                                                                                                      11-OCT-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human
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                                                                                           (CURA-) CURAGEN CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NOV1 protein
                     ABA01980
                                                      RΑ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YIECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVN 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LPMRAQFKANHPFLFFIRHTHTNTILFCGKLASP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AVYFKGKWQSAFTKSETINCHFKSPKCSGK--AVAMMHQERKFNLSVIEDPSMKILELRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YLSCSEKWYQARLQTVDFEQSTEETRKMINAWVENKTNGKVANLFGKSTIDPSSVMVLVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LPQSTLFRADHPFLFVIR--KDDIILFSGKVSCP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VNNKLSMIILLPYGIANLKQIEKQLNSGTFHEWTSSSNMMEREVEVHLPRFKLEIKYELN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -NGGINMYVLLPEN--DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMK 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIYFKGQRQNKF---
                                                                                                                                                              2000US-193339P.
2000US-195343P.
2000US-195005P.
2000US-195088P.
2000US-195792P.
2000US-196556P.
                                                     Spaderna
Spytek K
                                                                                                                 2000US-197525P
2001US-0823187
                                                                                                                                         2000US-197081P.
2000US-197087P.
                                                                                                                                                                                                                                        2000US-193205P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein; 395
                                                 KA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                      Taupier RJ,
iu X, Pattı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ------QGKNVTVEMMYQIGTFKLAFVKEPQMQVLELPY
                                                      c RJ, Padigaru
Patturajan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                        M, Burgess
Gusev VY;
                                                                                                                                                                                                                                                                                                                                                                                                        antiarthritic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer;
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New G protein-coupled

receptor

related

polypeptides

and

polynucleotides

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RESULT 14
ABB5320
ID ABB5
XX ABB5
XX ABB5
XX IP I2-F
DT 12-F
DT 12-F
DT Huma
XX Huma
KW Huma
KW Huma
KW neur
KW anti
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XX Plac
XX WO2C
XX WO2C
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Best Local
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                                                                              Human; nootropic; neuroprotective; anticonvulsant; antidepressant; neuroleptic; tranquiliser; antiarrhythmic; cardiant; antiasthmatic antinflammatory; antilipaemic; hepatotropic; virucide; antidiabet nephrotropic; anorectic; cytostatic; vaccine; neurological disease cardiovascular disease; respiratory disease; liver disease; renal disease; seletal muscle disease; gastrointestinal disease; placental disease; testicular cancer; male fertility; pancreatic d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        obesity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human G-protein coupled receptors, designated NOV1, NOV2, NOV3, NOV4, NOV5a, NOV5b, NOV6a, NOV6b, NOV7, NOV8b, NOV9 and NOV10. These car nov5a, NOV5b, NOV6a, NOV6b, NOV7, NOV8b, NOV9 and NOV10. These car nov5b, NOV5b, NOV6a, NOV6b, NOV9 and NOV10. These car nov5be used in the treatment of NOV7, NOV8b, NOV9 and NOV10 cancer, metabolic, neurodegenerative, immune, haematopoietic, developmental, retinal, feeding, neurological and psychotic diseases and disorders and infections. The present sequence is the NOV1 protein, the gene for which is found on chromosome 18. The NOV1 protein shares homology with the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       neurodegenerative, retinal,
                 WO200181363-A1
                                                  HOMO
                                                                                                                                                                                                                   Human polypeptide
                                                                                                                                                                                                                                                      12-FEB-2002
                                                                                                                                                                                                                                                                                       ABB53280
                                                                                                                                                                                                                                                                                                                         ABB53280 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention
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                                                saptens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sent invention provides the protein and protein coupled receptors, designated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GINMYVLLPEND-----LSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VYFKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRY-NG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEFSQNESKEPAGSINNESGLVSCYFGQLLSKLDRIKTDYTLSIANRLYGEQEFPICQEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NTASGY----GNSSNSQSGLQS-QLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MASLAAANAEFCENLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LDGVIQFYHTTIESVDFQKNPEKSRQEINFWVECQSQGKIKDLFSKDAINAETVLVLVNA
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                                                                                                                                                                                                                                                                                                                                                                                                         SLRSWVEFNANHPFLFFIRHNKTQTILFYGRVCSP
                                                                                                                                                                                                                                                                                                                                                                                                                                         OLPOSTLFRADHPFLFVIR--KDDIILFSGKVSCP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NSILQDMGITDIFDETRADLTGISPSPNLYLSKIIHKTEVEVDENGTQAAAATGAVVSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KOYLRALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VYFKAKWETYFDHENTVDAPFCLNQNENKSVKMMTQKGLYRIGFIEEVKAQILEMRYTKG
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                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                         Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and treatment of metabolic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 771.5; DB 24;
Pred. No. 2.4e-61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immune,
                                                                                                                                                                                                                                                                                                                         394
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hematopoietic disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and coding sequences ted NOV1, NOV2, NOV3,
                                                                                                                               rdiant; antiasthmatic;
virucide; antidiabetic;
neurological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and NOV10. These can
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diabetes,
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                                                                                  disease
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Best Local
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11-MAY-2000;
25-MAY-2000;
26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                      infarction; respiratory diseases including asthma, chronic obstructive pulmonary disease, cystic fibrosis and adult respiratory distress syndrome; liver diseases including hypercholesterolaemia, cirrhosis, viral and nonviral hepatitis, Type II diabetes mellitis, and impaired glucose tolerance; renal disease including renal failure, acute tubular necrosis and glomerulonephritis; skeletal muscle diseases including bulenburg's disease, hypoglycaemia and obesity; gastrointestinal diseases including lymphaglectasia; diseases of placenta including choriocarcinoma; diseases of testes including testicular cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated polypeptide comprising a 277, 480, 583, 581, 628, 424, 638, 229, 310, 841, 241, 369, 382, 185, 586, 1026, 844, 782, 262, 394, 471, 485, 286, 533, 495, 350, 619, 490, 462, 255, 784, 252, 593, 472, 607, 781, 640, 686 or 154 mmino acid sequence as given in the specification. The polypeptides, modulators of the polypeptides and antibodies against the polypeptides are useful for treating diseases such as neurological and psychiatric diseases, myotonic dystrophy, anorexia and depression; cardiovascular diseases including congestive heart failure, Hodgkin's disease and myocardial including congestive heart failure, Hodgkin's disease and myocardial
                                                                                                                                                                                                                                                                                                                                                                       male reproductive diseases including low testosterone and male infertility; and disease of pancreas including diabetic ketoac Type 1 and 2 diabetes and obesity. The present sequence is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel polypeptides and polynucleotides useful as a vaccine for preventing and treating diseases associated the polypeptide, Alzheimer's disease, dyslipidemia, obesity, diabetes, infertiasthma, ammesias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 90-91; 116pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                asthma, amnesias
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                                                                                                                                                                                                                                                                                                                                                           polypeptide of
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DB; ABA90345.
 181
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                                                                                                                                                                                                              MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                                                                                                                             MDSLVTANTKFCFDLFQEIGKDDRHKNIFFSPLSLSAALGMVRLGARSDSAHQIDEVLHF
                YFKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRY-NGG
                                                                                                                             NKTTEPLDQQAGSLNNESGLVSCYFGQLLSKLDRIKTDYTLSIANRLYGEQEFPICQEYL
                                                                 DGV1QFYHTT1ESVDFQKNPEKSRQE1NFWVECQSQGK1KELFSKDA1NAETVLVLVNAV
                                                                                              ECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAV
 YFKAKWETYFDHENTYDAPFCLNANENKSYKMMTQKGLYRIGFIEEVKAQILEMRYTKGK
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Q;
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2000US-203336P.
2000US-207087P.
2000US-207546P.
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                                                                                                                                              -GYGNSSNSQSGLQS-QLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYI 115
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                                                                                                                                                                                                                                                                                                                                                           invention.
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                                                                                                                                                                                                                                                                          39.3%;
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PLC.
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                                                                                                                                                                                                                                                           Score 769; DB 2
Pred. No. 4e-61;
8; Mismatches 1
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                                                                                                                                                                                                                                                             134;
                                                                                                                                                                                                                                                                                          23;
                                                                                                                                                                                                                                                                                                                                                                          diabetic ketoacidosis, sequence is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xiang
                                                                                                                                                                                                                                                                                          Length 394;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Region
                 New DNA encoding squamous cell carcinoma antigen - scale antigen prodn. for use as diagnostic reagent also useful as hybridisation probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Region
                                                                                                        N-PSDB;
                                                                                                                                                                   Kato H,
                                                                                                                                                                                                                                                                         30-NOV-1990;
                                                                                                                                                                                                                                                                                                                  29-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                          09-JUL-1992
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                                                                                                                                                                                                            (DAIN-) DAINABOT CO (DAIN-) DAINABOT KK.
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DB; AAQ25817.
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                                                                                                                                                                   Sekiguchi K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LPQSTLFRADHPFLFVIR--KDDIILFSGKVSCP 380
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376..378
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93..95
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antigen sequences"
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antigen sequences"
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antigen sequences"
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                                       allowing large
or immunogen,
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Matches 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                carcinoma (SCC). The Ag (which can be isolated from SCC of the cervix uteri, pulmonary or oesophagal carcinoma, etc.) is known as a diagnostic reagent for SCC but is not easily produced on a large scale from human cancer cells. By expressing the DNA sequence encoding this protein, in e.g. E.coli, yeast or mammalian cells, Ag can be prepd. in large quantities. Ag can also be used as an immunogen (to produce encoding gene can be detected by hybridisation with this sequence. Ag is homologous with serine protease inhibitors so may be useful therapeutically.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
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356
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                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                   MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                   GINMYVLLPE -- NDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYL
                                                                                                                                                               IYFKGQWEKKFNKEDTKEEKFWPNKNTYKSIQMMRQYTSFHFASLEDVQAKVLEIPYKGK
                                                                                                                                                                                                                                                                                          ----NTASGYGNSSNSQSG-LQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDY
                                                                                                                                                                                                                                                                                                                              DLSMIVLLPNQIDGLQKLEEKLTAEKLMEWTSLQNMRETRVDLHLPRFKVEESYDLKDTL
                                                                                                                                                                                           VYFKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG-
                                                                                                                                                                                                                                                                          DQVTENTTGKAATYHVDRSGNVHHQFQKLLTEFNKSTDAYELKIANKLFGEKTYLFLQEY
---PASTNEEFHCNHPFLFFIRQNKTNSILFYGRFSSP
                         KQLPQST--LFRADHPFLFVIR--KDDIILFSGKVSCP 380
                                                      RTMGMVDIFN-GDADLSGMTGSRGLVLSGVLHKAFVEVTEEGAEAAAATAVVGFGSS---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 9-10, Fig 4; 21pp; German.
                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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Pred. No. 1.4e-59;
1; Mismatches 126;
390
                                                                                                                                                                                                                                                                                                                                                                                                             Length 390;
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No.
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Listing first 45 summaries
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3: /cgn2_6/ptodata/1,
4: /cgn2_6/ptodata/1,
5: /cgn2_6/ptodata/1,
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/cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
/cgn2_6/ptodata/1/1aa/6A_COMB.pep:*
/cgn2_6/ptodata/1/1aa/6B_COMB.pep:*
/cgn2_6/ptodata/1/1aa/B_COMB.pep:*
/cgn2_6/ptodata/1/1aa/PCTUS_COMB.pep:*
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US-09-266-910-4
US-08-121-714-8
US-08-1477-1108A-8
US-08-127-714-4
US-08-127-1108A-4
US-08-127-110-4
US-08-127-110-4
US-08-127-112-4
US-08-127-112-4
US-08-128-97-110
US-09-123-912-110
US-09-643-597-110
US-09-643-597-112
US-07-768-286B-6
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Sequence 6,	Sequence 4,	Sequence 4,	Sequence 4,	Sequence 2,	Sequence 5,	Sequence 5,	Sequence 5,	Sequence 5,	Sequence 7,	Sequence 7,	Sequence 7,	Sequence 7,	Sequence 17,	Sequence 2,	Sequence 2,	Sequence 2,	Sequence 4,
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ALIGNMENTS

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Sequence 34, Application US/08472659
Fatent No. 5831030
GENERAL INFORMATION:
APPLICANT: TSUDJINOTO, Masafumi
APPLICANT: IFASA, FLYVIKİ
APPLICANT: IVASA, FLYVIKİ
APPLICANT: IVASA, FLYVIKİ
APPLICANT: MAKAZATO, HİTOSHİ
APPLICANT: MAKAZATO, HİTOSHİ
APPLICANT: MAKAZATO, HİTOSHİ
APPLICANT: MAKAZATO, HİTOSHİ
APPLICANT: VAMAGUCHI, NO. 5831030mli
APPLICANT: YAMAGUCHI, NO. 5831030mli
APPLICANT: YAMAGUCHI, NO. 5831030mli
APPLICANT: YAMAGUCHI, NO. 5831030mli
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSEE: BUTIG, DOAGNE, SWECKER & MATHİS
STATE: VİLGİNİA
COMPUTER READABLE FORM:
MEDIUM TYPE: PLOPY disk
COMPUTER: IBM PC COMPATING
COMPUTER: IBM PC COMPATING
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTON DATA:
COASSIEICATION NUMBER: US/08/472,659
FILLING DATE: 07-JUL-1995
CLASSIEICATION DATA:
APPLICATION NUMBER: US/08/472,659
FILLING DATE: 07-JUL-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/472,659
FILLING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/472,659
FILLING DATE: 17-JUL-1993
PRIOR APPLICATION NUMBER: US/08/472,659
FILLING DATE: 17-JUL-1995
PRIOR APPLICATION NUMBER: US/08/472,659
FILLING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: US/08/472,659
FILLING DATE: 17-JUL-1993
PRIOR APPLICATION NUMBER: US/08/472,659
FILLING DATE: 11-JUL-1993
PRIOR APPLICATION NUMBER: US/08/472,659
FILLING DATE: 14-JUL-1993
PRIOR APPLICATION NUMBER: US/08/091,028
FILLING DATE: 14-JUL-1993
PRIOR APPLICATION NUMBER: US/08/091,028
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; LENGTH: 380 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-472-659-34
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Matches 380;
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                                                                                                                                                                                                                                                                                        APPLICANT: KURIHARA, APPLICANT: YAMAICHI, APPLICANT: YAMAICHI, APPLICANT: YAMAICHI, TITLE OF INVENTION: M. NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.
CURRENT APPLICATION DATA:
                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                 APPLICATION NUMBER: US/08/474,661 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                             STREET: George Ma
CITY: Alexandria
STATE: Virginia
                                                                                                                                                                             COUNTRY: United States ZIP: 22313-1404
APPLICATION NUMBER:
                                                                                                                                                                                                                                                           ADDRESSEE:
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YAMAICHI, Kozo
YAMAGUCHI, No. 5874253omi
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ISHIDA, No. 5874253uhiro
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TSURUOKA, No. 5874253uo
NAKAZATO, Hiroshi
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INFORMATION FOR SEQ ID NO: 34

SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
TYPE: amino acid
TYPE: 110ear
                                                                                                                                                                                            Patent No. 5972886 GENERAL INFORMATION:
                                                                                                                                                                                                                      Sequence 34, Application US/08611977
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APPLICATION NUMBER: JP 4-2
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-0
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                         NUMBER OF SEQUENCES: 3: CORRESPONDENCE ADDRESS:
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                                                     APPLICANT: YAMAGUCI
                                                                                APPLICANT:
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               ADDRESSEE:
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P.O.
                                                               KURIHARA, Tatsuya
YAMAICHI, Kozo
YAMAGUCHI, No. 5972886omi
                                                                                                           MIURA, Kenju
ISHIDA, No. !
                                                                                                                                      TSUROUÖKA, NO. 5972886uo
NAKAZATO, Hiroshi
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Burns, Doa
O. Box 1404
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                                                     MEGAKARYOCYTE DIFFERENTIATION FACTOR
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              Doane,
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              Swecker
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Pred. No. 1
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RESULT 4
US-08-568-147B-2
; Sequence 2, Application US/08568147B
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; TOPOLOGY: linear
; MOLECULE TYPE: prot
US-08-611-977-34
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/611,977 FILING DATE: 06-MAR-1996 CLASSIFICATION: 435
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MEDIUM TYPE: Floppy disk
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APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
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380; Conserv
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                                                                                      FLFVIRKDDIILFSGKVSCP 380
FLFVIRKDDIILFSGKVSCP 380
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                                                                                                                                                       DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
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GENERAL INFORMATION:
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TELEX: 230 901 SANS UNFORMATION FOR SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 800,95
FILING DATE: 02-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: DIG19110, Frank S.
REGISTRATION NUMBER: 31,34
REFERENCE/DOCKET NUMBER: 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Suminami, Yoshinori
APPLICANT: Kato, Hiroshi
APPLICANT: Sekiguchi, Kiyoshi
APPLICANT: Takeda, Katsumichi
TITLE OF INVENTION: DNA FRAGMENT CODING FOR SQUAMOUS CELL
TITLE OF INVENTION: CARCINOMA-ASSOCIATED ANTIGEN
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/568,147B
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 516-742-4343
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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165; Conserv
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                                                                                                                                                                                                                                  DQVTENTTGKAATYHVDRSGNVHHQFQKLLTEFNKSTDAYELKIANKLFGEKTYLFLQEY 119
        KQLPQST--LFRADHPFLFVIR--KDDIILFSGKVSCP 380
                                                         RALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAAT-----GSNIVE 346
                                                                                                                                                                      IYFKGQWEKKFNKEDTKEEKFWPNKNTYKSIQMMRQYTSFHFASLEDVQAKVLEIPYKGK 239
                                        RTMGMVDIFN-GDADLSGMTGSRGLVLSGVLHKAFVEVTEEGAEAAAATAVVGFGSS---
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41.5%; Pred. No. 1.6e-63;
rative 81; Mismatches 126
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Length 390,

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US-09-266-910-3
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US-09-266-910-3
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                                                      Sequence 4, Application Patent No. 6344362 GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
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       TITLE OF INVENTION:
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                                           APPLICANT:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                              356
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                                                                                                                                                                                                                                                                                                                                                                                                                 175 VYFKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           164;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MNSLSEANTKFMFDLFQQFRKSKEN-NIFYSPISIISALGMVLLGAKDNTAQQIKKVLHF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     h 38.1%;
Similarity 41.2%;
64; Conservative 8
                                                                                                                                                                                              KQLPQST--LFRADHPFLFVIR--KDDIILFSGKVSCP 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                              ---PASTNEEFHCNHPFLFFIRQNKTNSILFYGRFSSP
                                                                                                                                                                                                                                             RTMGMVDIFN-GDADLSGMTGSRGLVLSGVLHKAFVEVTEEGAEAAAATAVVGFGSS
                                                                                                                                                                                                                                                                             RALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAAT-----GSNIVE 346
                                                                                                                                                                                                                                                                                                              DLSMIVLLPNEIDGLQKLEEKLTAEKLMEWTSLQNMRETRVDLHLPRFKVEESYDLKDTL
                                                                                                                                                                                                                                                                                                                                                                               IYFKGQWEKKFNKEDTKEEKFWPNKNTYKSIQMMRQYTSFHFASLEDVQAKVLEIPYKGK
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   Use of a r
hepatitis
                                                                                           us/09266910
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                      a recombinant protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 747; DB 4;
Pred. No. 4.8e-63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                      receptor of
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                                                                                                                                                                                                                                                                           Patent No. 5470970 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                            Sequence 8,
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COMPUTER READABLE FORM:
MEDIDIM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM ps/2 model 502 or 555X
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 8
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                          APPLICANT: Sager, Ruth
TITLE OF INVENTION: MASPIN, A NOVEL SE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: HYPOTHETICAL:
                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                         ZIP:
                                                                                                      COUNTRY:
                                                                                                                     STATE: Massachusetts
                                                                                                                                           CITY: Boston '
                                                                                                                                                         STREET:
                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                 347
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                                                                                      TRY: U.S.A.
02110-2804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISMIVLLPNEIDGLQKLEEKLTAEKLMEWTSLQNMRETRVDLHLPRFKVEESYDLKDTL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RTMGMVDIFN-GDADLSGMTGSRGLVLSGVLHKAFVEVTEEGAEAAAATAVVAFGSS---
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41.2%;
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Pred. No. 7.5e-63;
81; Mismatches 127;
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239 233 179

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RESULT 8
US-08-477-108A-8
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REGISTRATION NUMBER: 34,819

REFERENCE, DOCKET NUMBER: 0053

TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070

TELEPAX: (617) 542-8906

TELEFX: 2001.54

INFORMATION FOR SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 37.3%; Score 730.5; DB 1; Best Local Similarity 37.9%; Pred. No. 1.7e-61; Matches 146; Conservative 85; Mismatches 135;
                                                                                                                                                                   Sequence 8,
Patent No.
                                                                                                                                                GENERAL INFORMATION:
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LENGTH: 375
TYPE: amino acid
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APPLICATION NUMBER: 07/938,823
FILING DATE: 09/01/92
APPLICATION NUMBER: 07/844,296
FILING DATE: 02/28/92
               TITLE OF INVENTION: MASPIN, A NOVEL SERPIN WITH TITLE OF INVENTION: TUMOR SUPPRESSING ACTIVITY NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                        APPLICANT: Sager, Ruth
APPLICANT: 'Zou, Zhiqiang
APPLICANT: Anisowicz, Anthony
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 02/28/91 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
   ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                LLPEN-----DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA 293
                                                                                                                                                                                    Application US/08477108#
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEQLSTANTHFAVDLFRALNESDPTGNIFISPLSISSALAMIFLGTRGNTAAQVSKALYF 60
                                                                                                                                                                                                                                                                                                                                                      LGVQDLFNRGKADLSGMSGARDLFVSKIIHKSFVDLNEEGTEAAAATAGTIMLAMLMPEE
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Fish & Richardson P.C
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APPLICATION NUMBER: 09/01/93
FILING DATE: 09/01/93
APPLICATION NUMBER: 07/938
FILING DATE: 09/01/92
APPLICATION NUMBER: 07/844
FILING DATE: 02/28/92
APPLICATION NUMBER: 07/662
FILING DATE: 02/28/91
FILING DATE: 02/28/91
FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
NAME: FRASET, Janis K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PS/2 model 50z or 55sx OPERATING SYSTEM: MS-DOS (Version 5.0 SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
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LENGTH: 375
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/477,108A FILING DATE: June 7, 1995 CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE:
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                                                                           LFRADHPELFVIRKDDI--ILFSGK 376
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                                                                                                                                                    LGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQST
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                                                                                                                                                                                                                                      LLPEN-----DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA 293
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(617) 542-8906
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37.9%;
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Pred. No. 1.7e-61;
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; Patent No. 5905023
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Best Local Similarity
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CURRENT APPLICATION DATA:
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FILING DATE: 09/01/93
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
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TITLE OF INVENTION: MAN
TITLE OF INVENTION: TU
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FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
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ADDRESSEE: Fish & Richardson P.C.
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APPLICATION NUMBER: 0
FILING DATE: 02/28/92
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LLPDDIEDESTGLEKIEKQLTLEKLREWTKPENLYLAEVNVHLPRFKLEESYDLTSHLAR 290
                                                            WQEKFMKEATRDAPFRLNKKDTKTVKMMYQKKKFPYNYIEDLKCRVLELPYQGKELSMII
                                                                               WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG-GINMYV 239
                                                                                                                          MYGAELASVDFQQAPEDARKEINEWVKGQTEGKIPELLVKGMVDNMTKLVLVNAIYFKGN
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Best Local Similarity
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GENERAL INFORMATION:
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REGISTRATION NUMBER:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
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Pred. No. 1.7e-61;
Mismatches 135;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/
FILING DATE: 09/01/92
APPLICATION NUMBER: 07/
FILING DATE: 02/28/92
                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 00530/072001
TELECOMMUNICATION INFORMATION:
TELECHONNE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PS/2 Model 50z or 55s; OPERATING SYSTEM: MS-DOS (Version 5 SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish 6 R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: MASPIN, A NOVEL SERPIN WITH TITLE OF INVENTION: TUMOR SUPPRESSING ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 0 FILING DATE: 02/28/91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
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WTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK 120
                                                                               MEQLSSANTRFALDLFLALSENNPAGNIFISPFSISSAMAMVFLGTRGNTAAQLSKTFHF
                                                                                                                                     MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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38.6%; Pre
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US-08-477-108A-4
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                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/121,
FILING DATE: 09/01/93
APPLICATION NUMBER: 07/938,
FILING DATE: 09/01/92
APPLICATION NUMBER: 07/844,
FILING DATE: 02/28/92
APPLICATION NUMBER: 07/662,
APPLICATION NUMBER: 07/662,
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APPLICATION NUMBER: 07/662,
APPLICATION NUMBER: 07/6
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                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08,
FILING DATE: June 7, 1995
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ITLE OF INVENTAGES: 11
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
CORRESPONDENCE Fish & Richardson P.C.
TORRESPONDENCE Fish & Richardson P.C.
                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 06 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: MASPIN, A NOVEL SITITLE OF INVENTION: TUMOR SUPPRESSING
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OPERATING SYSTEM:
SOFTWARE: WORDPE:
                                                                                                                                                                                                                                                                                               NAME: Fraser, Janis K. REGISTRATION NUMBER: 34,819
                      STRANDEDNESS:
                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                     TELEPHONE:
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02110-2804
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                                                                                                                                                                                      (617) 542-8906
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SYSTEM: MS-DOS (Version
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RESULT 13
US-08-477-112-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4, Application US/08477112
Patent No. 5905023
GENERAL INFORMATION:
APPLICANT: Sager, Ruth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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                             APPLICATION NUMBER: 07/844
FILING DATE: 02/28/92
APPLICATION NUMBER: 07/662
FILING DATE: 02/28/91
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
                                                                                                                                                                                            FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                               SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                            COMPUTER: IBM PS/
OPERATING SYSTEM:
                                                                                                                                                               APPLICATION NUMBER: 0 FILING DATE: 09/01/93
                                                                                                                              APPLICATION NUMBER: 07
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                                                                                                                                                                                                                                                 APPLICATION NUMBER:
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SYSTEM: MS-DOS (Version
               r, Janis K.
 NUMBER:
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                                                                                07/662,216
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Pred. No. 1e
06570/002003
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RESULT 14
PCT-US93-08322-4
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Best Local Similarity
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                                                                                                                      COMPUTER: IBM PS/2 Model 50z or 55s
OPERATING SYSTEM: MS-DOS (Version 5
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08322
                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 0
FILING DATE: 09/01/92
APPLICATION NUMBER: 0
                                                                                                                                                                                                                                                                                                                                        APPLICANT: Sager, Ruth
TITLE OF INVENTION: MASPIN, A I
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 379
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                                                                                                                                                                                                                                                                                    STREET: STREET: Boston Massa
                                                                                                                                                                                                                                                    ZIP:
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TELEFAX: (617) 542-8906
TELEX: 200154
                                                                                        CLASSIFICATION:
                                                                                                           FILING DATE
                                                                                                                                                                                                                                                                     COUNTRY:
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02110-2804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application PC/TUS9308322
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LLPEN-----DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WKDKFMKEATTNAPFRLNKKDRKTVKMMYQKKKFAYGYIEDLKCRVLELPYQGEELSMVI
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                                                                                                                                                                                                                                                                                       Massachusetts
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02/28/92
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                                                   07/938,823
                  07/844,296
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SOFTWARE: PatentIn Ver.
SEQ ID NO 110
LENGTH: 391
TYPE: PRT
ORGANISM: Homo sapiens
US-09-123-912-110
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US-09-123-912-110
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                                                                                                                                                                                                                                                                                                         Sequence 110, Application US/09123912A Patent No. 6312695
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TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 379
                                                                                                             PRIOR APPLICATION NUMBER: 09/040,802
PRIOR FILING DATE: 1998-03-18
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                    FILE REFERENCE: 210121.455C1
CURRENT APPLICATION NUMBER: US/09/123,912A
CURRENT FILING DATE: 1998-07-27
                                                                                                                                                                                                     APPLICANT: Reed, Steven G.

APPLICANT: Wang, Tongtong
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY OF LUNG CANCER
FILE REFERENCE: 210121.455C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 00530/072001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
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ATTORNEY/AGENT INFORMATION:
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Query Match

36.5%;

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Search completed: July 11, 2003, 12:02:13 Job time: 68.9418 secs

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Result
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Sequence 34, Appl
Sequence 62, Appl
Sequence 67, Appl
Sequence 946, Appl
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Sequence 246, Appl
Sequence 29, Appl
Sequence 29, Appl
Sequence 29, Appl
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Sequence 27, Appl
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Sequence 4, Appli	Sequence 134, App	Sequence 2, Appli	Sequence 2, Appli		-	•	•	Sequence 6, Appli	Sequence 31, Appl		Sequence 1440, Ap	Sequence 21, Appl	Sequence 55, Appl	Sequence 101, App	Sequence 95, Appl.	Sequence 4, Appli	Sequence 4538, Ap	Sequence 4, Appli	Sequence 169, App	112,	Sequence 112, App	Sequence 112, App	Sequence 112, App	Sequence 110, App	Sequence 110, App

ALIGNMENTS

RESULT 1 US-10-091-442-34

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Sequence 34, Application US/10091442

Patent No. US20020164711A1

GENERAL INFORMATION:

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KURIHARA, Tatsuya

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                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                       TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                         APPLICANT:
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STATE: V
COUNTRY:
                                                                                                                         ADDRESSEE:
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REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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LENGTH: 380 amino acids
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                                                              Alexandria
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                                Virginia
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                                                                                           E: Burns, Doa P.O. Box 1404
                                                                                                                                                                                                                                                  KURIHARA, Tatsuya
YAMAICHI, Kozo
YAMAGUCHI, No. US20010026931Alomi
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ilarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TSUJIMOTO, Masafumi
States
                                                                                                                         Doane,
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                                                                                                                            Swecker & Mathis
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Pred. No. 6.8e-161;
; Mismatches 0;
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Best Local Similarity
Matches 380; Conserv
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LENGTH: 380 amino acids
TYPE: amino acid
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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                                                                                   DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
FLFVIRKDDIILFSGKVSCP 380
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                                                                   DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
                                                                                                                                       LPENDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIF
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Pred. No. 6.8e-161;
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RESULT 3 US-10-198-070-62

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Sequence 62, Application US/10198070 Publication No. US20030109437A1

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APPLICANT: GERMELL, JACK
APPLICANT: GERMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TREATMENT OF TUMORS AND OTHER
TITLE OF INVENTION: CONDITIONS REQUIRING THE REMOVAL OR DESTRUCTION OF
TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
CURRENT APPLICATION NUMBER: US/10/198,070
CURRENT FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR APPLICATION NUMBER: 50/331,477
PRIOR FILING DATE: 2001-07-19
SPIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 125
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 62
LERGTH: 392
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Sequence 67, Application US/10198070

Publication No. US20030109437A1

GENERAL INFORMATION:
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                                    APPLICANT: AVERBACK, PAUL
APPLICANT: GEMMELL, JACK
PAPLICANT: GEMMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TITLE OF INVENTION: CONDITIONS REQUIRING THE TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
CURRENT APPLICATION NUMBER: US/10/198,070
CURRENT FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR FILING DATE: 2001-07-19
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; ORGANISM: Homo sapiens
US-10-198-070-62
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                   APPLICATION NUMBER: 60/306,150
FILING DATE: 2001-07-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 114 YIECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVN 173
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                                                                                                                                                                                  THE TREATMENT OF TUMORS AND OTHER THE REMOVAL OR DESTRUCTION OF
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; SOFTWARE: PatentIn Ver. 2
SEQ ID NO 67
; LENGTH: 392
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-198-070-67
                                                                                                                                                                                                        APPLICANT: AVERBACK, PAUL
APPLICANT: GEMMELL, JACK
APPLICANT: GEMMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THI
TITLE OF INVENTION: CONDITIONS REQUIRING THI
TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
FILE REFERENCE: 59003.000008
CURRENT APPLICATION NUMBER: 00/306,161
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR APPLICATION NUMBER: 60/30,150
PRIOR APPLICATION NUMBER: 60/31,477
PRIOR FILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-07-19
PRIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 125
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US-10-198-070-70
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                                                                                     ; ORGANISM: HOMO US-10-198-070-70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 70, Application US/10198070 Publication No. US20030109437A1 GENERAL INFORMATION:
  Query Match
Best Local Similarity
Matches 169; Conserv
                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 169;
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SOFTWARE: PatentIn Ver. 2.1
                                                                                                                             TYPE: PRT
                                                                                                                                                 LENGTH: 392
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  41.8%; ilarity 43.1%; Conservative {
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43.1%; Pred. No. 1.3e-62;
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Score 819; DB 9; Length 392; Pred. No. 1.5e-62; Mismatches 131; Indels
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; ORGANISM: Homo US-10-012-896-946
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US-10-012-896-946
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 Query Match
                                                                                        SEQ ID NO 946
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APPLICANT:
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APPLICANT:
                                                                                                      NUMBER OF SEQ ID NOS: 1011
SOFTWARE: FastSEQ for Windows
                                                                                                                                  CURRENT APPLICATION NUMBER: US/10 CURRENT FILING DATE: 2001-12-10
                                                                                                                                                               APPLICANT: Wantanabe, Yoshihiro
APPLICANT: Meagher, Madeleine Joy
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C27
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SHTVDSLKPGFKDSPKCSQAGRIHSEFGVEFSQINQPDSNCTLSIANRLYGTKTMAFHQQ 120
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                                                                                                                                                                                                                                                       Foy,
                                                                                                                                                                                                                                                                                                                             Skeiky, Yasir A.W.
Hepler, William T.
Henderson, Robert A.
                                                                                                                                                                                                                                                                    McNeill, Patricia D.
Houghton, Raymond L.
Vinals de Bassols, Carlota
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                                                                                                                                                                                                                                         Fanger, Gary R.
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Stolk, John A.
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Kalos, Michael D.
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                                                                                                                                                                                                                                                                                                                                                                                                          Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                     Vedvick,
                                                                                                                                                                                                                                                                                                                                                                                                                                     Day, Craig H.
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                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                           Samuel X.
                                                                                                                                                                                                                                                         Teresa
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                                                                                                                                                                                                                                                                                                                  John
                                                                                                                                                                                                                                                                                                                                                                                                                       Thomas S
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 40.78;
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                                                                                                                                                   US/10/012,896
                                                                                                       Version
Score 796.5;
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DВ
9;
Length 379;
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Query Match
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; ORGANISM: Home US-09-895-814-946
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                                                                       SOFTWARE: FastSEQ for Windows Version SEQ ID NO 946
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 946, Application US/09895814 Publication No. US20020193296A1
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                                                                                                      APPLICANT: Fanger, Gary R.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER FILE REFERENCE: 210121.427C26
CURRENT APPLICATION NUMBER: US/09/895,814
CURRENT FILING DATE: 2001-06-29
NUMBER OF SEO ID NOS: 990
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                                LENGTH: 379
TYPE: PRT
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Hural, John
McNeill, Patricia D.
McNeill, Raymond L.
The American Description of the Common Paymond L.
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Mitcham, Jennifer L.
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Hepler, William T.
                                                                                                                                                                                                                                                                                                                                                                                             Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                             Carter, Darrick Li, Samuel X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vedvick,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kalos, Michael D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Harlocker,
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                 sapiens
                                                                                                                                                                                                                                          Teresa
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Thomas
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40.78;

Score 796.5;

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Length

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APPLICANT: Taupler, Raymond J
ITTLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAMI
FILE REFERENCE: 15966-745
CURRENT APPLICATION NUMBER: US/09/823,187
CURRENT FILING DATE: 2001-03-29
PRIOR APPLICATION NUMBER: 60/193,39
PRIOR FILING DATE: 2000-03-30
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/193,205
PRIOR APPLICATION NUMBER: 60/195,343
PRIOR APPLICATION NUMBER: 60/195,343
PRIOR APPLICATION NUMBER: 60/195,089
PRIOR FILING DATE: 2000-04-05
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,095
PRIOR APPLICATION NUMBER: 60/195,792
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lence 2, Application US/09823187
OR APPLICATION NUMBER: 60/196,556
OR FILING DATE: 2000-04-11
OR APPLICATION NUMBER: 60/197,081
OR FILING DATE: 2000-04-13
OR APPLICATION NUMBER: 60/197,525
OR FILING DATE: 2000-04-14
OR APPLICATION NUMBER: 60/197,087
OR FILING DATE: 2000-04-14
DATE: 2000-04-14
OR APPLICATION NUMBER: 60/197,087
OR FILING DATE: 2000-04-14
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Shimkets, Richard A
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Padigaru, Muralidhar
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                                  PRIOR APPLICATION NUMBER: 60/193,339
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/193,205
PRIOR APPLICATION NUMBER: 60/193,205
PRIOR FILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: 60/195,343
PRIOR APPLICATION NUMBER: 60/195,088
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,005
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,005
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,792
PRIOR FILING DATE: 2000-04-10
PRIOR FILING DATE: 2000-04-10
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Best Local
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APPLICANT: Gusev, Vladimir Y
APPLICANT: Liu, Xiaohong
APPLICANT: Majunder, Kumud
APPLICANT: Padigaru, Muralidi
    PRIOR
PRIOR
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CURRENT FILING DATE: 2001-03-29
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TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING
FILE REFERENCE: 15966-745
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  FILING DATE: 2000-04-1
APPLICATION NUMBER: 60
FILING DATE: 2000-04-1
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Similarity 40.3%;
59; Conservative 89
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Shimkets, Richard A
Spaderna, Steven K
Spytek, Kimberly
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Padigaru, Muralidhar
                        60/196,556
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Pred. No. 2e-58
89; Mismatches
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2e-58;
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RESULT 10
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-823-187-29
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                               CURRENT FILING DATE: 2001-03-29
PRIOR APPLICATION NUMBER: 60/193,339
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/193,205
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/195,343
PRIOR FILING DATE: 2000-04-05
PRIOR FILING DATE: 2000-04-05
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PRIOR APPLICATION NUMBER: 60/19
PRIOR FILLING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/19
PRIOR FILING DATE: 2000-04-14
NUMBER OF SEQ ID NOS: 103
SOFTWARE: Patentin Ver. 2.1
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Publication No.
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TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC
FILE REFERENCE: 15966-745
CURRENT APPLICATION NUMBER: US/09/823,187
CURRENT FILING DATE: 2001-03-29
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   APPLICATION FILING DATE:
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Shimkets, Richard A
Spaderna, Steven K
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Padigaru, Muralidhar
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 NUMBER: 60/195,088
: 2000-04-06
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41.5%; Pred. No. 9.2e-57;
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US-09-823-187-27
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APPLICANT: Burgess, Catherine
APPLICANT: Gusev, Vladimir Y
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LENGTH: 390
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Best Local Similarity
                                               APPLICANT: Patturajan, Meera
APPLICANT: Shimkets, Richard A
APPLICANT: Spytek, Kimberly
APPLICANT: Taupier, Raymond J
TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS
FILE REFERENCE: 15966-745
               CURRENT APPLICATION NUMBER: US/09/823,187
CURRENT FILING DATE: 2001-03-29
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Padigaru, Muralidhar
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 NUMBER:
60/193,339
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ENCODING SAME

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NUMBER OF SEQ ID NOS: 103
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 30
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PRIOR FILING DATE: 2000-04-10
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                                                                                                                                                      RALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAAT-----GSNIVE 346
                                                                                                                                                                                                                                                         GINMYVLLPE--NDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYL
                                                                                                                                                                                                                                                                                                               IYFKGQWEKKFNKEDTKEEKFWPNKNTYKSIQMMRQYTSFHFASLEDVQAKVLEIPYKGK
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---PTSTNEEFHCNHPFLFFIRONKTNSILFYGRFSSP
                                                                                                        RTMGMVDIFN-GDADLSGMTGSRGLVLSGVLHKAFVEVTEEGAEAAAATAVVGFGSS---
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60/193,205

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Sequence 28, Application US/09823187
Publication No. US20030096952A1
GENERAL INFORMATION:
APPLICANT: Burgess, Catherine
APPLICANT: Gusev, Vladimir Y
APPLICANT: Liu, Xiaohong
APPLICANT: Majumder, Kumud
APPLICANT: Padigaru, Muralidhar
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; ORGANISM: Homo sapiens
US-09-823-187-27
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US-09-823-187-28
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Best Local Similarity 40.8%;
Matches 160; Conservative 8
                    APPLICANT:
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      APPLICANT
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OR FILING DATE: 2000-04-06
OR APPLICATION NUMBER: 60/195,792
OR FILING DATE: 2000-04-10
OR APPLICATION NUMBER: 60/196,556
OR APPLICATION NUMBER: 60/197,081
OR APPLICATION NUMBER: 60/197,081
OR FILING DATE: 2000-04-13
OR APPLICATION NUMBER: 60/197,525
OR FILING DATE: 2000-04-14
OR APPLICATION NUMBER: 60/197,087
OR FILING DATE: 2000-04-14
OR APPLICATION NUMBER: 60/197,087
OR FILING DATE: 2000-04-14
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R APPLICATION NUMBER: 60/19
R FILING DATE: 2000-03-30
R APPLICATION NUMBER: 60/19
R FILING DATE: 2000-04-05
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Majumder, Kumud
Padigaru, Muralidhar
Patturajan, Meera
Shimkets, Richard A
Spaderna, Steven K
                                                                                                                                                                                                                                                                                                    TNEEFCCNHPFLFFIRQNKTNSILFYGRFSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                           DLSMIVLLPNEIDGLQKLEEKLTAEKLMEWTSLQNMRETCVDLHLPRFKMEESYDLKDTL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MASLAAANAEFCFNLFREMDDNOGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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                                                                                                                                                                                                                                                                                                                                                                             RTMGMVNIFN-GDADLSGMTWSHGLSVSKVLHKAFVEVTEEGVEAAAATAVVVVELSSPS
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; Pred. No. 2e-56;
84; Mismatches 134
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RESULT 13 US-08-731-566-2

Sequence 2, Application US/08731566 Publication No. US20030072752A1 GENERAL INFORMATION:

APPLICANT:

Toshihiko Hibino et al.

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LENGTH: 390
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-187-28
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Best Local S
Matches 159
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LENGTH: 390
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SOFTWARE: Patentin ver
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PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/193,205
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/195,343
PRIOR FILING DATE: 2000-04-05
PRIOR FILING DATE: 2000-04-05
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PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/195,792
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PRIOR FILING DATE: 2000-04-06
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CURRENT FILING DATE: 2001-03-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER:
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Local Similarity 40.6%;
les 159; Conservative 84
                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                        175 VYFKGKWOSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG- 233
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                                                                                                                                                                                                                                                                                                                                                                                                                 -----NTASGYGNSSNSQSG-LQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDY 114
TNEEFCCNHPFLFFIRQNKTNSILFYGRFSSP
                    ST-LFRADHPFLFVIR--KDDIILFSGKVSCP
                                                                                                            RALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKOLPO 351
                                                                                                                                                      DLSMIVLLPNEIDGLQKLEEKLTAEKLMEWTSLQNMRETCVDLHLPRFKMEESYDLKDTL
                                                                                                                                                                                                                                    IYFKGQWENKFKKENTKEEKFWPNKNTYKSVQMMRQYNSFNFALLEDVQAKVLEIPYKGK
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                                                                           RIMGMVNIFN-GDADLSGMIWSHGLSVSKVLHKAFVEVIEEGVEAAAATAVVVFELSSPS
                                                                                                                                                                                                                                                                                                             LDAIKKFYQTSVESTDFANAPEESRKKINSWVESQTNEKIKNLFPDGTIGNDTTLVLVNA
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Pred. No. 5.5e-56;
4; Mismatches 135;
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Best Local Similarity 41.0%;
Matches 163; Conservative 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 60/013,755
FILING DATE: 20-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: MGI
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 60/013,755
FILING DATE: 20-MAR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/005,679
FILING DATE: 17-OCT-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                       180
                       356
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                                                                                                                                                    240 DLSMIVLLPNEIDGLORLEEELTAEKLMEWTSLONMRETRVDLHLPRFKVEESYDLKDTL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Louis Myers
                    ---PTSTNEEFHCNHPFLFFIRQNKTNSILFYGRFSSP
                                                   KQLPQST--LFRADHPFLFVIR--KDDIILFSGKVSCP 380
                                                                                                                                                                                                                    IYFKGQWEKKFNKEDTKEEKFWPNKNTYKSIQMMRQYTSFHFASLEDVQAKVLEIPYKGK
                                                                                                                                                                                                                                                                                   LDAIKKFYQTSVESVDFANAPEESRKKINSWVESQTNEKIKNLIPEGNIGSNTTLVLVNA
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                                                                                                                                                                                                                                                                                                                                                      DOVTENTTGKAATYHVDRSGDVHHQFQKLLTEFNKSTDAYELKIANKLFGEKTYLFLQEY
                                                                                                                                                                                                                                                                                                                                                                                   ----NTASGYGNSSNSQSG-LQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDY 114
                                                                                     RTMGMVDIFN-GDADLSGMTGSRGLVLSGVLHKAFVEVTEEGAEAAAATAVVGFGSS---
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(617)227-5941
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 740; DB 7
Pred. No. 1e-55;
1; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                     Matches
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RESULT 14

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301 WLCSPAAHXGYLCYFFFXRVSXGKIKKKMIXXYILFLPTKIMLAKNPDFVFGRPSYLYIL

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US-10-012-896-947
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 947
                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 947, Application US/10012896 Publication No. US20020183251A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Meagher, Madeleine Joy
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C27
CURRENT APPLICATION NUMBER: US/10/012,896
CURRENT FILING DATE: 2001-12-10
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 90, 215, 225, 232, 233, 289, LOCATION: 369, 374, 378, 425, 430
OTHER INFORMATION: Xaa - Any Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                      Match 37.7%;
Local Similarity 28.8%;
193
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                             241 GFCWFFLLYFLQIFIFPLLSDNNFYHRAPNWRLGILRFSGRGENPFFSXRSLGLFFPYIL
                                                                                                                                                                                                                                                                                                                                                                        178;
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                                                                                                                                                                                                                                                                                                                                    1 MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                                                                 AVYFKGKWQSAFTKSETIN-----
                                                                                                                                                                  YLSCSEKWYQARLQTVDFEQSTEETRKTINAWVENKTNGKVANLFGKSTIDPSSVMVLVN
                                                                                                                                                                                                    YIECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVN 173
                                                                                                                                                                                                                                   SHTVDSLKPGFKDSPKCSQAGRIHSEFGVXFSQINQPDSNCTLSIANRLYGTKTMAFHQQ
                                                                                                                                                                                                                                                                     ----NTASGYGNSSN-SQSG-LQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKD
                                                                                                                                                                                                                                                                                                        MGSLSTANVEFCLDVFKELNSNNIGDNIFFSSLSLLYALSMVLLGARGETAEQLEKVLHF
                                                                                                AIYFKGQWQNKFQVRETVKSPFQLSEVSILFSDSXQMLEDTIIIXGQFRKMXXFSENIGL
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Hepler, William
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Carter, Darrick
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                                                                                                                                                                                                                                                                                                                                                                       81; Mismatches
                                                                                                                                                                                                                                                                                                                                                                     Score 738.5; DB y;
Pred. No. 2.6e-55;
Pred. No. 2.16e-51;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            322,
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                                                                                                                                                                                                                                                                                                                                                                        Indels
 -KSPK - - - -
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W 60	1 MASLAAANAEPCFNLFREMDDNOGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV	Qy Db
11;	y Match Local Similarity 28.8%; Pred. No. 2.6e-55; hes 178; Conservative 81; Mismatches 121; Indels 237; Gaps	Query Match Best Local Matches 17
	NAME/KEY: variant LOCATION: (1)(617) OTHER INFORMATION: Xaa - Any amino acid 19-895-814-947	is-0
	RT 4: Homo sapiens	; TYPE: PRT ; ORGANISM:
	947	Jas Das
	F SEQ ID NOS: 990	
	CLING DATE:	
	INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND INVENTION: DIAGNOSIS OF PROSTATE CANCER	
	roy, Teresa Fanger, Gary R.	
	Vina	
	McNeill, Patricia	
	Henderson, Robert Hural, John	; APPLICAN
		; APPLICAN
	Wang, Ai	APPLICANT:
		; APPLICAN
	Vedvick, Th	APPLICANT:
	Stolk, John /	; APPLICANT:
		; APPLICANT:
	Jiang, Yuqiu	: APPLICANT
	Mitcham, Harlocke	; APPLICANT:
	Dillon, Davin C.	; APPLICANT:
	INFORMATION: NT: Xu, Jiangchun	; GENERAL INF ; APPLICANT:
	14-947 947, Application US/09895814 Dn No. US20020193296A1	RESULT 15 US-09-895-814-947 ; Sequence 947, Ap ; Publication No.
	601 RHTHTNTILFCGKLASP 617	
	366 RKDDIILFSGKVSCP 380	0у 31
£1 600		Db 541
/I 365	306 DLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHPFLFVI	0у з
/KA 540	481 LKQIEKQLNSGTFHEWTSSSNMMEREVEVHLPRFKLETKYELNSLLKSLGVTDLFNQVKA	Db 41
CA 305	NKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIFDES	Qy 2
N 480	21 VSILXSFSSXQGKNVTVEMMYQIGTFKLAFVKEPQMQVLELPYVNNKLSMIILLPVGIAN	Db 4:
D 245	QERKFNLSVIEDPSMKILELRY-NGGINMYVLLPEN-	Оу . 21
Y 420	361 LEQFSLXPXLILNXKNGXPLQREVIRNLLCSFYFTHAFRVFMQISVLRKVISTHTCALTY	Db 30
- 201	200	Оу 2

	T NOTIFICATION OF	001	<u></u>
			, Qy
I 600	1 DLSGMSPTKGLYLSKAIHKSYLDVSEEGTEAAAATGDSIAVKSLPMRAQFKANHPFLFFI	b 541	Db
I 365		у 306	Qy
A 540		b 481	Db
A 305	6 LSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIFDESKA	у 246	Оу
N 480	1 VSILXSFSSXQGKNVTVEMMYQIGTFKLAFVKEPQMQVLELPYVNNKLSMIILLPVGIAN	b 421	Db
D 245		у 202	γo
Y 420	1 LEQFSLXPXLILNXKNGXPLQREVIRNLLCSFYFTHAFRVFMQISVLRKVISTHTCALTY 420	b 361	Db
- 201	0CS	у 200	ОУ
L 360	1 WLCSPAAHXGYLCYFFFXRVSXGKIKKKMIXXYILFLPTKIMLAKNPDFVFGRPSYLYIL 360	b 301	Db
- 199	3KSPK	у 193	νo
L 300	1 GFCWFFLLYFLQIFIFPLLSDNNFYHRAPNWRLGILRFSGRGENPFFSXRSLGLFFPYIL 300	b 241	Db
- 192	3	у 193	οy
L 240	1 AIYFKGQWQNKFQVRETVKSPFQLSEVSILFSDSXQMLEDTIIIXGQFRKMXXFSENIGL	b 181	Db
- 192		у 174	Qy
N 180	1 YLSCSEKWYQARLQTVDFEQSTEETRKTINAWVENKTNGKVANLFGKSTIDPSSVMVLVN	b 121	Db
N 173		у 114	Qy
Q 120	1 SHTVDSLKPGFKDSPKCSQAGRIHSEFGVXFSQINQPDSNCTLSIANRLYGTKTMAFHQQ	b 61	Db
D 113		у 61	Qy
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Search completed: July 11, 2003, 12:37:36 Job time : 112.393 secs

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OM protein -

Sequence:

Database

Minimum

80 80

5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
430	432	433	433.5	434	435.5	437	438.5	444	446.5	446.5	450	460	461.5	462.5	463.5
21.9	22.1	22.1	22.1	22.2	22.2	22.3	22.4	22.7	22.8	22.8	23.0	23.5	23.6	23.6	23.7
366	479	232	413	416	403	418	413	366	406	405	408	418	397	418	433
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T25504	S41066	DXCH	JX0154	B29131	S08102	JH0494	JX0267	T16119	A39339	A39088	S11320	S31507	T06183	JX0129	ITHUC
hypothetical prote	heparin cofactor I	ovalbumin-related	alpha-1-antiprotei	kallikrein-binding	serine proteinase	alpha-1-antichymot	alpha-1-antiprotei	hypothetical prote	protein C inhibito	alpha-1-antiprotei	serine proteinase	serine proteinase	serpin – barley	contrapsin precurs	alpha-l-antichymot

ALIGNMENTS

A;Molecule type: mRNA
A;Residues: 1-350,'G',',352-390 <SIL>
A;Cross-references: EMBL:U19556; NID:g1276435; PID:g1052869
A;Cross-references: EMBL:U19556; NID:g1276435; PID:g1052869
R;Suminami, Y; Kishi, F; Sekiguchi, K; Kato, H.
Blochem. Blophys. Res. Commun. 181, 51-58, 1991
A;Title: Squamous cell carcinoma antigen is a new member of the serine protease inhib
A;Title: Squamous cell carcinoma antigen is a new member of the serine protease inhib
A;Title: Squamous cell carcinoma antigen is a new member of the serine protease inhib
A;Accession: JT0966
A;Accession: JT0966
A;MOID:92068241; PMID:1958219
A;Accession: JT0967
A;Accession: JT0967
A;Accession: JT0967 C;Superfamily: antithrombin III
C;Keywords: cysteine proteinase inhibitor; glycoprotein
F;65,93,171,376;Binding site: carbohydrate (Asn) (covale
F;654/Inhibitory site: Ser (cathepsin L) #status predict A;Cross-references: GDB:625364; OMIM:600517 A;Map position: 18q21.3-18q21.3 A;Introns: 55/3; 74/3; 117/3; 157/1; 204/3; 256/3 A;Molecule type: protein A;Residues: 11-21;231-237;240-256;303-325 <SUM2> C;Comment: This antigen probably acts as a proteinase inhibitor to modulate the host submitted to the EMBL Data Library, January 1995 A; Reference number: ${\tt G07968}$ A; Gene: GDB:SCCAl; SCC A;Status: preliminary; translated from GB/EMBL/DDBJ A; Molecule type: DNA A; Residues: 1-117 <SCH2> A; Status: nucleic acid sequence not shown Query Match Best Local Similarity EMBL:U19562; NID:g897835; PIDN:AAA86316.1; PID:g897844 38.4%; Score Pred. 752; DB 2; No. 1.3e-45; (covalent) predicted Length 390 #status predicted

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A;Gene: GDB:SCCA2; PII1
A;Cross references: GDB:636556; OMIM:600518
A;Map position: 18q21.3-18q21.3
A;Introns: 55/3; 74/3; 117/3; 157/1; 204/3; 256/3
C;Superfamily: antithrombin III
C;Keywords: glycoprotein; serine proteinase inhibitor
C;Keywords: glycoprotein; serine proteinase inhibitor
F;1-22/Domain: signal sequence #status predicted <SGS-
F;23-384/Product: leupin #status predicted <MAT>
F;65,93,170,376/Binding site: carbohydrate (Asn) (covalent) #status |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N;Alternate names: proteinase inhibitor 11 (PII1); squamous cell carcinoma antige (;Species: Homo sapiens (man) (;Species: Homo sapiens (man) (;Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text_change 26-May-2000 (;Accession: I38202; S66675; S57522 R;Schneider, S.S.; Schick, C.; Fish, K.E.; Miller, E.; Pena, J.C.; Treter, S.D.; Proc. Natl. Acad. Sci. U.S.A. 92, 3147-3151, 195 Proc. Natl. Acad. Sci. U.S.A. 92, 3147-3151, 195 A;Title: A serine proteinase inhibitor locus at 18213 contains a tandem duplica A;Reference number: I38200; MUID:95241462; PMID:7724531 A;Accession: I38200
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                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: EMBL:X89015; NII
C;Genetics:
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FEBS Lett. 373, 61-65, 1995
A;Title: Identification of a novel human serpin gene; cloning sequencing and
A;Reference number: S66675; MUID:96013887; PMID:7589435
                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Residues: 7-351, 'V', 353-384
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A; Residues: 1-390 <SCH>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Status: nucleic acid sequence not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         leupin precursor – human
                                                                                                                                                               354/Inhibitory site:
                                                                        Matches
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1 MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KQLPQST--LFRADHPFLFVIR--KDDIILFSGKVSCP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LDAIKKFYQTSVESVDFANAPEESRKKINSWVESQTNEKIKNLIPEGNIGSNTTLVLVNA
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                                                                        Conservative
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                                                                                             40.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                NID: 9887464;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GB:U19569;
                                                                   Score 743; DB 2;
Pred. No. 5.4e-45;
4; Mismatches 135
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                                                                                                                                                            proteinase)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NID: 9852466
                                                                                                                                                                                                                                                                                                                                                                                                              PIDN:CAA61420.1;
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                                                                                                                                                     ">Latus predicted predicted
                                                                                                                                                                                                                                                                                                                                                                                                           PID: 9887465
                                                                   14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      leukocyte elastase inhibitor - horse
N;Alternate names: plasminogen activator inhibitor-2 homolog
C;Species: Equus caballus (domestic horse)
C;Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change
C;Accession: A42421; A37276; S34062
R;Dubin, A.; Travis, J: Enghild, J.J: Potempa, J.
J. Biol. Chem. 267, 6576-6583, 1992
                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: protein
A;Molecule type: protein
A;Residues: I-41,'E',43-325,'VD',326-379 <DUB2>
R;Rordula, T.; Dubin, A.; Schooltink, H.; Koj, A.; Heinrich, P.C.; Rose-John, S.
Biochem. J. 293, 187-193, 1993
A;Title: Molecular cloning and expression of an intracellular serpin: an elastase
A;Reference number: S34062; MUID:93319507; PMID:7687128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Experimental source: leukocyte
A; Note: sequence extracted from NCBI backbone (NCBIP:89849)
R; Dubin, A.; Travis, J; Enghild, J.J; Potempa, J.
submitted to the Protein Sequence Database, December 1991
A; Reference number: A37276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Title: Equine leukocyte elastase inhibitor. Primary structure A; Reference number: A42421; MUID:92202200; PMID:1551869 A; Accession: A42421
                       20
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                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 1-379 < KOR>
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                                                                                                                                                                                                                                                                                                                                                               A; Status: preliminary
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                                                                                                                                                                                                                                                   serine proteinase
                                                                                                                                                                                    Similarity
NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK
                                                                   MEQLSTANTHFAVDLFRALNESDPTGNIFISPLSISSALAMIFLGTRGNTAAQVSKALYF
                                                                                                MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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                                                                                                                                                            Conservative
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                                                                                                                                                                                  37.7%;
38.0%;
                                                                                                                                                                                                                                                      inhibitor
                                                                                                                                                            85;
                                                                                                                                                                                  Score 739.5; DB 2; Pred. No. 9.2e-45;
                                                                                                                                                            Mismatches
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111 TYGADLASVDFQHASEDARKTINOMVKGQTEGKIPELLASGMVDNMTKLVLVNAIYFKGN 181 WQSAFTKSETINCHFKSPKCSGKAVAMMHOERKFNLSVIEDPSMKILELRYNG-GINMYV :	QY 61 WTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK 120	ין ע	Query Match 36.9%; Score 722.5; DB 2; Length 379; Best Local Similarity 38.6%; Pred. No. 1.5e-43; Matches 150; Conservative 74; Mismatches 146; Indels 19; Gaps 4;	A; Map position: 6p25-6p24.3 C; Superfamily: antithrombin III C; Keywords: serine proteinase inhibitor	C;Genetics: 5, 05,5, 110,111 125,204 215,210 244,235-271, A ,2/3-2/4;291-301 CFAC> A;Gene: GDB:ELANH2; ET; PI2 A;Cross-references: GDB:132914; OMIM:130135	2004-213-216-2044-2555-271 (4/ 273-274-201-201-	R;Packard, B.Z.; Lee, S.S.; Remold-O'Donnell, E.; Komoriya, A. Biochim. Biophys. Acta 1269, 41-50, 1995 A;Title: A serpin from human tumor cells with direct lymphoid immunomodulatory activity: A;Reference number: 865750; MUID:96049524; PMID:7578269	A;Status: preliminary A;Status: preliminary A;Molecule type: mRNA A;Molecule type: mRNA A;Residues: 1-379 <remd a02055<="" a;cross:="" femd:="" preference:="" th=""><th>R;Remold-O'Donnell, E.; Chin, J.; Alberts, M. Proc. Natl. Acad. Sci. U.S.A. 89, 5635-5639, 1992 A;Title: Sequence and molecular characterization of human monocyte/neutrophil elastase i A;Reference number: S27383; MUID:92302296; PMID:1376927 A;Accession: S27383; MUID:92302296; PMID:1376927</th><th>\$27383 S2</th><th>Qy 354 LFRADHPPLFVIRKDDIILFSGKVSCP 380 </th><th>Oy 294 LGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPOST 353 :: : : : : :: </th><th>Qy 240 LLPENDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA 293 : : : : : : ::::::::::::::::</th><th> </th><th>181</th><th>Qy 121 LYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYEKGK 180 </th><th>Db 61 DTVEDIHSRFQSLNADINKPGAPYILKLANRLYGEKTYNFLADFLASTQK 110</th></remd>	R;Remold-O'Donnell, E.; Chin, J.; Alberts, M. Proc. Natl. Acad. Sci. U.S.A. 89, 5635-5639, 1992 A;Title: Sequence and molecular characterization of human monocyte/neutrophil elastase i A;Reference number: S27383; MUID:92302296; PMID:1376927 A;Accession: S27383; MUID:92302296; PMID:1376927	\$27383 S2	Qy 354 LFRADHPPLFVIRKDDIILFSGKVSCP 380	Oy 294 LGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPOST 353 :: : : : : ::	Qy 240 LLPENDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA 293 : : : : : : ::::::::::::::::		181	Qy 121 LYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYEKGK 180	Db 61 DTVEDIHSRFQSLNADINKPGAPYILKLANRLYGEKTYNFLADFLASTQK 110
RESULT 6 DYCH OVALIDUMIN-related Y protein - chicken C;Species: Gallus gallus (chicken) C;Date: 17-Dec-1982 #sequence_revision 17-Dec-1982 #text_change 18-Jun-1999 C;Accession: A01244	3 4 3	Qy 283 KNYEMKQYLRALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGS 342 Company	1/3 TRIVIVNMYTERGUMDREERRENTREEREMMNNSTSRSVQMMTQSHSESETELEDIQARI 227 LELRY-NGGINMYVLLPENDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIE :	167 AVMVLVNAVYFKGKWOSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKI	Qy 107 VYGFHKDYIECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSS 166 : : ::: :	Qy 61 NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEK 106 ::::	Qy 1 MASLAAANAEFCFNLFREMDDNOGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV 60 : : : : : : : : : : :	Query Match 36.5%; Score 715.5; DB 2; Length 391; Best Local Similarity 38.0%; Pred. No. 4.8e-43; Matches 152; Conservative 78; Mismatches 141; Indels 29; Gaps 7;	A;Map position: 18q21.3-18q22 C;Superfamily: antithrombin III C;Reywords: serine proteinase inhibitor F;355/Inhibitory site: Val (unidentified proteinase) #status predicted	A;Accession: JC/118 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-391 <spr> A;Cross-references: GB:AF169949; NID:g5911368; PIDN:AAD55765.1; PID:g5911369 C:Genetics:</spr>	Accession: JC7118 Spring, P.; Nakashima, T.; Frederick, M.; Henderson, Y.; Clayman, G. ochem. Biophys. Res. Commun. 264, 299-304, 1999 Title: Identification and cDNA cloning of headpin, a novel differenti Reference number: JC7118; MUID:99458661; PMID:10527881	JC7118 JC7118 headpin serine proteinase inhibitor - human C;Species: Homo saplens (man) C;Date: 19-May-2000 #text change 26-May-2000	FIRHNSSGS	354 LFRADHPELEVIRKDDIILESGKVSCP 380	Db 291 LGVQDLFNSSKADLSGMSGARDIFISKIVHKSFVEVNBEGTBAAAATAGIATFCMLMPEE 350	231 LLPDDIEDESTGLKKIEGOLTLEKLHEWTKPENLDETEVNVSLPREKLEESYTLUSDLAR	Qy 240 LLPENDLSBIENKLTFQNLMEWTNPRRWTSKYVEVFFPQFKIEKNYEMKQYLRA 293

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RESULT 7
$38962
serpin - pig
$c; Species: Sus scrofa
C; Species: 19 Mar-1997 #
C; Accession: $38962
R; Teschauer, W.F.; Me
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A;Title: Primary structure of a porcine leukocyte serpin. A;Reference number: S38962; MUID:94039085; PMID:7901009
A;Accession: S38962
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A; Residues: 1-388 < LBIN
A; Residues: 1-388 < LBIN
A; Residues: 1-388 < LBIN
A; Residues: 1-388 < LBIN
A; Residues: 1-388 < LBIN
A; Cross - references: GB:J00922; GB:V00439; NID:g212899; PIDN:AAA68882.:
C; Genetics:
A; Introns: 56/3; 73/3; 116/3; 156/1; 203/3; 255/3
C; Superfamily: antithrombin III
C; Keywords: glycoprotein; phosphoprotein; serine proteinase inhibitor
F; 74-121/Disulfide bonds: #status predicted
F; 293/Binding site: carbohydrate (Asn) (covalent) #status predicted
F; 345/Binding site: phosphate (Ser) (covalent) #status predicted
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Nucleic Acids Res. 10, 4363-4382, 1982
A;Title: The ovalbumin gene family: complete
A;Reference number: A01244; MUID:83014329; PA
A;Accession: A01244
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-Mar-1997 #sequence_revision 19-Mar-1997
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MEQLSAANTRFALDLFRALNESNPAGNIFISPFSISSALAMILLGTRGNTEAQMSKALHF
                                MASLAAANAEFCFNLFREMDDNOGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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Pred. No. 9.8e-43;
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                                     LFRADHPFLFVIRKD--DIILFSGKVSCP
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                                                                                LGVQDLFG-SRADLTGMSEARDLFISKVVHKSFVEVNEEGTEAAAATXGIAVFAMLMPEE
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DFIADHPFIFFIRHNPSSNILFLGRLSSP
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plasminogen N; Alternate names: urokinase inhibitor activator inhibitor 2 precursor

C;Species: Homo sapiens (man)
C;Date: 22-Nov-1989 #sequence_revision 22-Nov-1989 #text_change 20-Oct-2000
C;Accession: A32853; I54218; A31366; A46543; A29362; A26553; A53815; A25021;
R;Ye, R.D.; Ahern, S.M.; Le Beau, M.M.; Lebo, R.V.; Sadler, J.E.
J. Biol. Chem. 264, 5495-5502, 1989
A;Title: Structure of the gene for human plasminogen activator inhibitor-2.
A;Reference number: A32853; MUID:89174589; PMID:2494165
A;Accession: A32853 S02435;

The

A; Molecule type: DNA A; Residues: 1-415 < YER>

R;Samia, J.A.; Alexander, S.J.; Horton, K.W.; Auron, P.E.; Genomics 6, 159-167, 1990
A;Title: Chromosomal organization and localization of the A;Reference number: 154218; MUID:90152678; PMID:2303256
A;Accession: 154218 A;Cross-references: GB:M24651; (R;Samia, J.A.; Alexander, S.J.; GB:M24652; GB:M24653; Horton, K.W.; Auron, GB:M24654; GB:M24655; GB: P.E.; Byers, M.G.; Shows, urokinase inhibitor GB:M24656; lows, T.B.

A; Status: preliminary; translated from GB/EMBL/DDBJ

A; Molecule type: DNA A; Residues: 1-415 < RES>

A;Cross-references: GB:M3155; NID:g340152; PIDN:AAA36797.1; PID:g340154 R;Antalis, T.M.; Clark, M.A.; Barnes, T.; Lehrbach, P.R.; Devine, P.L.; Proc. Natl. Acad. Sci. U.S.A. 85, 985-989, 1988 A;Title: Cloning and expression of a cDNA coding for a human monocyte-de A;Reference number: A31366; MUID:88125032; PMID:3257578 human monocyte-derived plasmin Schevzov,

A; Accession: A31366

A; Molecule type: mRNA A; Residues: 1-415 <ANT> A;Cross-references: GB:J03603; Snyder, NID:g189546; nyder, S.E.; Alexander, PIDN:AAA60004.1; PID:g189547 Alexander, S.J.; Rosenwasser,

Eddy, homolo

A; Title: Human monocyte Arg-serpin cDNA. Sequence, chro A; Reference number: A46543; MUID:87252928; PMID:3496414 Sequence, chromosomal assignment, and

A; Accession: A46543

A; Molecule type: mRNA A; Residues: 1-415 <WEB> PID:g35268 er, R.; Shaw,

Α.,

Kruithof

A;Cross-references: GB:Y00630; NID:g35267; PIDN:CAA68666.1; PIR;Schleuning, W.D.; Medcalf, R.L.; Hession, C.; Rothenbuehler, Mol. Cell. Biol. 7, 4564-4567, 1987
A;Title: Plasminogen activator inhibitor 2: regulation of gene A;Reference number: A29362; MUID:88142852; PMID:3325828
A;Accession: A29362
A;Molecule type: mRNA
A;Residues: 1-119,'D',121-403,'K',405-412,'C',414-415 <SCH> gene transcription during

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A;Cross-references: GB:M18082; N
R;Ye, R,D.; Wun, T.C.; Sadler, J
J. Biol. Chem. 262, 3718-3725,
A;Title: cDNA cloning and expres
A;Reference number: A26553; MUII
A;Accession: A26553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A:Molecule type: protein
A:Residues: 377-415 <KIS>
R:Kruithof, E.K.; Cousin, E.
B:Kruithof, E.K.; Cousin, E.
Biochem. Biophys. Res. Commun. 156, 383-388, 1988
A:Title: Plasminogen activator inhibitor 2. Isolation and A:Reference number: I52229; MUID:89025873; PMID:2845977
A:Accession: I52229
A:Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                F;1-22/Domain: signal sequence *status predicted <SIG>
F;23-415/Product: plasminogen activator inhibitor 2 *status predicted <MAT>
F;23-Modified site: acetylated amino end (Ser) (in mature form) *status predicted
F;75-115.339/Binding site: carbohydrate (Asn) (covalent) *status predicted
F;83.84.86/Cross-link: isopeptide (Gin) (interchain to Lys N6-amino of unidentified
F;380-381/Cleavage site: Arg-Thr (plasminogen activator) *status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: protein
A; Residues: 83-87 < JENN
R; Kruithof, E.K.O.; Vassalli, J.D.; Schleuning,
J. Biol. Chem. 261, 11207-11213, 1986
A; Title: Purification and characterization of a
A; Reference number: A25021; MUID:86278222; PMID:
A; Accession: A25021
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A;Title: A unique interhelical insertion in plasminogen activator inhibitor-2 A;Reference number: A53815; MUID:94253109; PMID:7910824
A;Accession: A53815
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A;Map position: 18q21.2-18q22
A;Introns: 56/3; 96/3; 139/3; 179/1; 226/3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Title: Determination of intermediates, products and cleavage A;Reference number: S02435; MUID:88167197; PMID:3280346 A;Accession: S02435
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A; Residues: 347-376 <KRU>
R; Kiso, U.; Kaudewitz, H.; I
FEBS Lett. 230, 51-56, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Superfamily: antithrombin III
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A; Residues: 1-56 <RE2>
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                                                                                                                                                                                                                                                                                                             h 33.9%; Score 664.5; DB 2; Similarity 34.7%; Pred. No. 2.1e-39; 44; Conservative 83; Mismatches 153;
IKNVIGEGGISSSAVMVLVNAVYFKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERK
                                                                                                                                                                                                                            MEDLCVANTLEALNLEKHLAKASPTONLELSPWSISSTMAMVYMGSRGSTEDQMAKVLQF
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                                                                                      YDLSIVNGLFAEKVYGFHKDYIECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGK
                                                            YLLESVNKLFGEKSASFREEYIRLCOKYYSSEPQAVDFLECAEEARKKINSWVKTQTKGK
                                                                                                                                            NEVGANAVTPMTPENFTSCGFMQQIQKGSYPDAILQAQAADKIHSSFRSLSSAINASTGN
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                                                                                                                                                                                                                                                                                                                                                                                               site: Arg (plasminogen activator) #status experimental
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A26553; MUID:87137674; PMID:3029122
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Ny.Alternate names: cytoplasmic antiproteinase 2 (CAP-2)
C;Species: Homo sapiens (man)
C;Date: 02-Jun-2000 #sequence_revision 02-Jun-2000 #text_change
C;Accession: A59273
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A:Map position: 18q21.3-18q21.3
C:Superfamily: antithrombin III
C:Keywords: proteinase inhibitor
F:339/Inhibitory site: Arg (unidentified proteinase) #status predicted
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A; Residues: 1-374 <SPR>
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novel mem

CAP2

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A; Molecule type: DNA
A; Residues: 1-386 <CAT>
A; Rosidues: 1-386 <CAT>
A; Rosidues: 1-386 <CAT>
A; Cross-references: GB:M34352; NID:g212501; PIDN:AAA48998.1; PID:g212503
A; Cross-references: GB:M34352; NID:g212501; DIDN:AAA48998.1; PID:g212503
A; Robertson, M.A.; Staden, R.; Tanaka, Y.; Catterall, J.F.; O'Malley, B.W.; B.
R; Robertson, M.A.; Staden, R.; Tanaka, Y.; Catterall, J.F.; O'Malley, B.W.; B.
A; Title: Sequence of three introns in the chick ovalbumin gene.
A; Reference number: 150605; MUID:79135070; PMID:423993
A; Reference number: Logicule type: DNA
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-4,'A',6-118,'F',120-155 <ROB>
A; Cross-references: EMBL:V00382; NID:g63051; PIDN:CAA23681.1; PID:g63052
R; McReynolds, L.; O'Malley, B.W.; Nisbet, A.D.; Fothergill, J.E.; Givol, D.;
Nature 273, 723-728, 1978
A; Title: Sequence of chicken ovalbumin mRNA.
A; Reference number: A93197; MUID:78199842; PMID:661981
A;Reference number: A90092; MUID:79186957; PMID:751624
A;Accession: A90092
A;Molecule type: protein
A;Residues: 6-17:30-36:61-79;116-124;367-374;380-386 <TH
R;Tsunasawa, S.; Narita, K.
J. Biochem. 92, 607-613, 1982
A;Title: Micro-identification of amino-terminal acetylam
A;Reference number: A61297; MUID:83056735; PMID:6754709
A;Accession: A61297
A;Molecule type: protein
A;Residues: 2-6 <TSUS
R;Takahashi, N.; Hirose, M.
J. Biol. Chem. 267, 11565-11572, 1992
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A; Residues: 2-33,'X',35-36 <PAL>
A; Thompson, E.O.P.; Fisher, W.K.
Aust. J. Biol. Sci. 31, 443-446, 1978
A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction and Extension of the acetylated amino A; Title: A correction amino A; Title: A correction and A; Title: A correction and A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A; Title: A correction amino A;
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A;Accession: A90093
A;Molecule type: protein
A;Residues: 2-17 <TH1>
R;Thompson, E.O.P.; Fisher, W.K.
Aust. J. Biol. Sci. 31, 433-442, 1978
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R;Palmiter, R.D.; Gagnon, J.; Walsh, K.A.
Proc. Natl. Acad. Sci. U.S.A. 75, 94-98, 1978
A;Title: Ovalbumin: a secreted protein without a transient hydrophobic leader sequence.
A;Reference number: A93827; MUID:78116057; PMID:272676
A;Accession: A93827
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A;Note: a number of silent polymorphic sites are idd
A;Note: Thr-188 is also predicted
R;Catterall, J.F.; O'Malley, B.W.; Robertson, M.A.;
Nature 275, 510-513, 1978
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A;Accession: A90455
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C;Date: 31-Dec-1979 #sequence_revision 30-Jun-1993 #text_change 15-Sep-2000
C;Accession: A90455; I50402; I50605; A93197; A93827; A90093; A90092; A61297;
R;Woo, S.L.C.; Beattie, W.G.; Catterall, J.F.; Dugaiczyk, A.; Staden, R.; Brc Biochemistry 20, 6437-6446, 1981
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c;Spectes: Gallus gallus (chick
C;Date: 31-Dec-1979 #sequence_r
C;Accession: A90455; I50402; I5
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A; Residues: 1-386 < MCI
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A; Residues: 1-386 <WOO>
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                                                                                                                                                                                                                                                              on of amino-terminal acetylamino MUID:83056735; PMID:6754709
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ovalbumin - Japanese quail
c;Species: Coturnix coturnix japonica (Japanese quail)
C;Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #tex
C;Accession: S11433
R;Mucha, J; Klaudiny, J; Klaudinyova, V; Hanes, J.;
Nucleic Acids Res. 18, 5553, 1990
A;Title: The sequence of Japanese quail ovalbumin cDNA.
A;Reference number: S11433; MUID:91016850; PMID:2216734

#text_change 16-Jul-1999

Simuth,

A; Molecule type: mRNA A; Residues: 1-383 < MUC>

antithrombin

EMBL:X53964; thrombin III

NID:g62643;

PIDN:CAA37916.1;

PID: 962644

A; Status: preliminary A; Accession: S11433

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C;Superfamily: antithrombin III
C;Keywords: acetylated amino end; glycoprotein; phosphoprotein
F;2-384/Product: ovalbumin #status experimental <MAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;2/Modified site: acetylated amino end (Gly) (in mature form) \#status F;69,345/Binding site: phosphate (Ser) (covalent) \#status experimental \#5,74-121/Disulfide bonds: \#status experimental
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Contents: annotation; X-ray crystallography, 1.95 angstroms, R;Stein, P.E.; Leslie, A.G.W.; Finch, J.T.; Carrell, R.W. J. Wol. Biol. 221, 941-959, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Stein, P.E.; Leslie, A.G.W. submitted to the Brookhaven F
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A; Residues: 60-73 'X', 75-85;112-119, 'EX', 122-123 <TAK>
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                                           LFRADHPFLFVIR--KDDIILFSGKVSCP
                                                                                                 MGITDVF-SSSANLSGISSAESLKISQAVHAAHAEINEAGREVVGSAEAGVDAASVSEE-
                                                                                                                                                                                                SMLVLLPDEVSGLEQLES I I NFEKLTEWTSSNVMEERK I KVYLPRMKMEEKY NLTSVLMA
                                                                                                                                                                                                                                              MMYVLLPE - - NDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA
                                                                                                                                                                                                                                                                                               FKGLWEKAFKDEDTQAMPFRVTEQESKPVQMMYQIGLFRVASMASEKMKILELPFASGTM
                                                                                                                                                                                                                                                                                                                                          FKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRY-NGGI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DKLPGFGDSIEAQCGTSVNVHSSLRDILNQITKPNDVYSFSLASRLYAEERYPILPEYLQ
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-FRADHPELECIKHIATNAVLFEGRCVSP
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34.7%;
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Pred. No. 4.6e-39;
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R;Riewald, M.; Schleef, R.R.
J. Biol. Chem. 270, 26754-26757, 1995
A;Title: Molecular cloning of bomapin (potease inhibitor A;Reference number: I39184; MUID:96070759; PMID:7592909
A;Accession: I39184
A;Status: preliminary
A;Molecula type: mRNA
A;Residues: 1-397 <RES>
A;Residues: 1-397 <RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
139184
bomapin - human
N;Alternate names: proteinase inhibitor 10 (PII0)
C;Species: Homo saplens (man)
C;Date: 01-Mar-1996 #sequence_revision 01-Mar-1996
C;Accession: 139184
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A;Map position: 14932.1-14932.1
C:Superfamily: antithrombin III
C:Keywords: serine proteinase i
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A;Gene: GDB:PIl0
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                                                                                                                                                          MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTE--ATAATGSNIVEKQLPQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DKLPGFGDSIEAQCGTSVNVHSSLRDILNQITKQNDAYSFSLASRLYAQETYTVVPEYLQ
                               YGFHKDYIECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STLFRADHPFLFVIR--KDDIILFSGKVSCP 380
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMLVLLPDDVSGLEQLESTISFEKLTEWTSSSIMEERKVKVYLPRMKMEEKYNLTSLLMA
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             YAFHNKYLEDMKTYFGAEPQPVNFVEASDQIRKDINSWVERQTEGKIQNLLPDDSVDSTT
                                                                                                                                         MDSLATSINQFALELSKKLAESAQGKNIFFSSWSISTSLTIVYLGAKGTTAAQMAQVLQF
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Pred. No. 4.9e-39;
96; Mismatches 139;
                                                                                                                                                                                                                       Score 658.5; DB 2; Pred. No. 5.1e-39;
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A;Map position: 13
C;Superfamily: antithrombin III
C;Keywords: serine proteinase inhibitor
F;343/Inhibitory site: Arg (unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proteinase inhibitor Spi3 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 08-Dec-1995 #sequence_revision
C;Accession: A57488
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A; Title: Gene structure,
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RESULT 14
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A; Residues: 1-378 <SUN>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Reference number:
A;Accession: A57488
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J. Biol. Chem. 2
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                                                                          DHPFLFVIR--KDDIILFSGKVSCP 380
                                                                                                                            DIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRA
                                                                                                                                                                         MLPDEHVELSTVEKEVTYEKFIEWTRLDKMDEEEVEVFLPKFKLEENYNMNDALYKLGMT
                                                                                                                                                                                                                                                                                                   FYEAELEELDFQGATEESRQHINTWVAKKTEDKIKEVLSPGTVNSDTSLVLVNAIYFKGN
                                                                                                                                                                                                                                                                                                                                                                 DKCSGNGGGDVHQ-GFQSLL----TEVNKTGTQYLLRTANRLFGDKTCDLLASFKDSCLK
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                                                                                                          DAFG-GRADFSGMSSKQGLFLSKVVHKAFVEVNEEGTEAAAATAGMMTVRCMRFTPRFCA
                                                                                                                                                                                                                                      WEKQFNKEHTREMPFKVSKNEEKPVQMMFKKSTFKMTYIGEIFTKILLLPYVSSELNMII
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 649; DB 2;
Pred. No. 2.2e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches 150;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 378
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59

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J. Biol. Chem. 268, 9541-9547, 7193

A;Title: Identification and purification of a novel serine proteinase inhibitor.

A;Reference number: A46672; MUID:93252826; PMID:8486644

A;Accession: A46672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A48681
placental thrombin inhibitor - human
placental thrombin inhibitor - human
N;Alternate names: cytoplasmic antiproteinase; intracellular serine proteina
C;Species: Homo sapiens (man)
C;Date: 07-Apr-1994 #sequence_revision 07-Jul-1995 #text_change 18-Jun-1999
C;Accession: A48681; A54352; A46672; B46672; C46672; S35750
C;Accession: A48681; A54352; A46672; B46672; C46672; B46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C46672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C4672; C46
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C; Superfamily: antithrombin III
C; Keywords: blocked amino end; c
E; 341/Inhibitory site: Arg (thro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Gene: GDB:PI6
A;Cross references: GDB:252025; OMIM:173321
A:Map position: 6p25-6p24.3
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A; Residues: 1-174, 'E', 176-361, 'S', 363-376 < MOR>
A; Residues: 1-184, 'E', 176-361, 'S', 363-376 < MOR>
A; Cross-references: GB: S69272; NID: g546087; PIDN: AAB30320.1;
A; Experimental source: placenta
A; Note: sequence extracted from NCBI backbone (NCBIN: 145231, R; Coughlin, P.B.; Tetaz, T.; Salem, H.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A:Experimental source: placenta
A:Note: authors translated the codon CAA for residue 198 as Gly
R:Morgenstern, K.A.; Sprecher, C.; Holth, L.; Foster, D.; Grant, F.J.; Chin
Blochemistry 33, 3432-3441, 1994
A:Title: Complementary DNA cloning and kinetic characterization of a novel
A:Reference number: A54352; MUID:94183847; PMID:8136380
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A;Residues: 47-60;63-81;91-98 <CO2>
A;Residues: 47-60;63-81;91-98 <CO2>
A;Experimental source: placenta, leukemic cell line K562
A;Note: sequence modified after extraction from NCBI back
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Coughlin, P.; Sun, J.; Cerruti, L.; Salem, H.H.; Bird, P. Proc. Natl. Acad. Sci. U.S.A. 90, 9417-9421, 1993
A;Title: Cloning and molecular characterization of a human intracellular serine A;Reference number: A48681; MUID:94022386; PMID:8415716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: mRNA
A; Residues: 1-376 < COI
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                                                                                                                                                                                                                                                                                                                                                                         NWDGQFDKENTEERLFKVSKNEEKPVQNMFKQSTFKKTYIGEIFTQILVLPYVGKELNMI
                                                                                                                                                                                                                                                                                                                                                                                                                               KWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG-GINMY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KFYQAEMEELDFISAVEKSRKHINTWVAEKTEGKIAELLSPGSYDPLTRLVLVNAVYFRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MASLAAANAEFCFNLFREM-DDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLH
ADHPFLFVI - -
                                                                            TDAFELGKADFSGM-SQTDLSLSKVVHKSFVEVNEEGTEAAAATAAIMMMRCARFVPRFC
                                                                                                                                                  KDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFR
                                                                                                                                                                                                                           IMLPDETTDLRTVEKELTYEKFVEWTRLDMMDEEEVEVSLPRFKLEESYDMESVLRNLGM
                                                                                                                                                                                                                                                                                                    VLLPE--NDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FNKSGGGG---DIHQGFQSLL----TEVNKTGTQYLLRVANRLFGEKSCDFLSSFRDSCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VNTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAE
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Arg (thrombin) #status predicted
   RKDDIILFSGKVSCP
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Pred. No. 2.
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Search completed: July 11, Job time: 77.732 secs

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RESULT 15
$20047

$200047

plasminogen activator inhibitor 2 - mou C;Species: Mus musculus (house mouse) C;Date: 07-Apr-1994 #sequence_revision C;Accession: $20047; $09616
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Title: Facultative polypeptide translocation allows a single mRNA to encode the A;Reference number: S09615; MUID:90059920; PMID:2583099 A;Accession: S09616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: EMBL:X16490; NID:g53589; R;Belin, D.; Wohlwend, A.; Schleuning, W.D.; EMBO J. 8, 3287-3294, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         submitted to the EMBL Data Library, A; Reference number: S20047
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A; Residues: 1-27 < BEL
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SP
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                                                                 FHQASVDVTEEGTVAAGGTGAVMTGRTGHGGPQFVADHPFLFFI-MDKITHTILFVGRFS
                                                                                                 MHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHPFLFVIRKDDI----ILFSGKVS
                                                                                                                                                                   TNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIFDESKADLSGIASGGRLYISRM
                                                                                                                                                                                                                                                                        IPNLLPEGSVDEDTKMVLVNAVYFKGKWKTPFEKKLNGLYPFRVNSHESIP-----VQM
                                                                                                                                                                                                                                                                                                       IKNVIGEGGISSSAVMVLVNAVYFKGKWQSAFTKSET----INCHFKSPKCSGKAVAM
                                                                                                                                   ISKDTLDEDDVVVYIPKFKLAQSYELKSILQSMGMEDAFNKGKANFSGMSERNDLFLSEV
                                                                                                                                                                                                                                      MHQERKFNLSVIEDPSMKILELRYNGGINMYVLLPE-----NDLSEIENKLTFQNLMEW
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P30740 homo sapien
Q9uiv8 homo sapien
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P01014 gallus gall
002739 bos taurus
P80229 sus scrofa
P05120 homo sapien
P048595 homo sapien
P01012 gallus gall
P19104 coturnix co
Q60854 mus musculu
P35237 homo sapien
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P19388 mus musculu
P35237 arttus norv
P70124 mus musculu
P30453 homo sapien
P29524 rattus norv
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D88575; BAA31232.1; AF027866; AAC64506.1; P05619; 1HLE. HGNC:13902; SERPINB7. 03357; 1PR000215; Serpin. PF00079; Serpin; 1. SM00093; SERPIN; 1. E; PS00284; SERPIN; 1.	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).	J. Clin. Invest. 102:828-836(1998). J. Clin. Invest. 102:828-836(1998).	SEQUENCE FROM N.A. SEQUENCE FROM N.A. TISSUE-Mesangial cells; TISSUE-Mesangial cells; MEDLINE-98376492; PubMed-9710452; Miyate T., Nangaku M., Suzuki D., Inagi R., Uragami K., Sakai H., Okubo K., Kurokawa K.; "A mesangium-predominant gene, megsin, is a new serpin upregulated in ITA nenbropathy"	SEQUENCE FROM N.A. MEDLINE-9736116; PubMed-9182567; MEDLINE-97326116; PubMed-9182567; Tsujimoto M., Tsuruoka N., Ishida N., Kurihara T., Iwasa F., Tsujimoto M., Rogi T., Kodama S., Katsuragi N., Adachi M., Yamashiro K., Rogi T., Kodama S., Katsuragi N., Adachi M., Miura K., Ratayama T., Nakao M., Yamaichi K., Hashino J., Haruyama M., Miura K., Nakanishi T., Nakazato H., Teramura M., Mizoguchi H., Yamaguchi N.; "Purification, CDNA clonning, and characterization of a new serpin with megakaryocyte maturation activity."; J. Biol. Chem. 272:15373-15380(1997).	Homo sapiens (Human). Homo sapiens (Human). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBI_TaxID=9606; [1]	0/36/3; 15-JUN-2002 (Rel. 41, Created) 15-JUN-2002 (Rel. 41, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Megsin (TP55) (Serpin B7).	

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"SERPINBI1 is a novel ov-serpin with at least 3 alleles.";

"SERPINBI1 is a novel ov-serpin with at least 3 alleles.";

Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.

-I- SUBCELULAR LOCATION: Cytoplasmic (By similarity).

-I- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
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Q96P15; Q96P14; Q96P13;
15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
InterPro; IPR000215;
Pfam; PF00079; serpin
PROSITE; PS00284; SER
                                        EMBL; AF419953; AAL16056.1; --
EMBL; AF419954; AAL16057.1; --
EMBL; AF419955; AAL16058 1; --
Genew; HGNC:14221; SERPINB11.
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Eukaryota; Metazoa; C
Mammalia; Eutheria; P
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Primates;
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                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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Pred. No. 1
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..2e-129;
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Best Local S
Matches 169
                                                                                                                                                                                                                                                                                       15-JUN-2002
15-JUN-2002
15-JUN-2002
Serpin B12.
                                                                    widely expressed and inhibits trypsin-like serine proteinases
J. Biol. Chem. 276:49320-49330(2001).
-!- FUNCTION: Inhibits trypsin and plasmin, but not thrombin,
-coagulation factor Xa, or urokinase-type plasminogen acti
-!- SUBCELLUTAR LOCATION: Cytoplasmic (By similarity).
-!- TISSUE SPECIFICITY: Expressed in many tissues, including
bone marrow, lymph node, heart, lung, liver, pancreas, te
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Serpin; S
ACT_SITE
VARIANT
                          This
                                                                                                                                                       SEQUENCE FROM N.A., AND CHARACTERIZATION.
MEDLINE=21623618; PubMed=11604408;
Askew Y.S., Pak S.C., Luke C.J., Askew D.J., Cataltepe S.,
Kato H., Lehoczky J., Dewar K., Birren B., Silverman G.A.;
"SERPINB12 is a novel member of the human ov-serpin family
                                                                                                                                                                                                                                         Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                     SB12_HUMAN
Q96P63;
 between the
the European
                                                                                                                                                                                                                                                                            SERPINB12
                                                                                                                                                                                                                              NCBI_TaxID=9606;
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                                     ovary, and intestine.
SIMILARITY: BELONGS TO
                        SWISS-PROT entry is copyright. It is produced through
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(Rel. 41,
(Rel. 41,
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Last sequence update)
Last annotation updat
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/FTId=VAR_012472.
I -> T (IN ALLELE B AND ALLELE C)
/FTId=VAR_012473.

W; 906F6707.
                                           THE SERPIN FAMILY.
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             of
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Pred. No. 4.1e-50;
                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                  PRT;
             Bioinformatics
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                                                OV-SERPIN
            and
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              a collaboration
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Best Local
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                                                                                                                                                                                                               SCC1_HUMAN STANDARD; PRT; 390 AA.
P29508; 096JZ1;
01-APR-1993 (Rel. 25, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Squamous cell carcinoma antigen 1 (SCCA-1) (Protein SERPINB3 OR SCCA)
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ACT_SITE
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AF411191; AALO5571.1; -. Genew; HGNC:14220; SERPINB12. InterPro; IPR000215; Serpin.
         SEQUENCE FROM N.A.
MEDLINE=95241462; PubMed=7724531;
Schneider S.S., Schick C., Fish K.E.,
Treter S.D., Hul S.M., Silverman G.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00079; serpin; 1.
PROSITE; PS00284; SERPIN; 1.
                                                                                                 SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE-92068241; PubMed-1958219;
Suminami Y., Kishi F., Sekiguchi K., Kato
"Squamous cell carcinoma antigen is a new
                                                                                                                                                                            Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                       protease
                                                                                                                                                                NCBI_TaxID-9606;
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                                                                          Biophys.
                                                                                                                                                                                                                                                                                                                                                                         AATGSNIVEKQLPQSTLFRADHPFLFVIR--KDDIILFSGKVSCP
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                                                                                       inhibitors.";
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Pred. No. 3.2e-46;
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Catarrhini; Hominidae
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1. FUNCTION: MAY ACT AS A PROTEASE INHIBITOR TO MODULATE THE HOST IMMUNE RESPONSE AGAINST TUNGR CELLS.

1. SUBCELLULAR LOCATION: Cytoplasmic.

1. TISSUE SPECIFICITY: SQUANOUS CELLS.

1. DEVELOPMENTAL STAGE: ITS EXPRESSION IS CLOSELY RELATED TO CELLULAR DIFFERENTIATION IN BOTH NORMAL AND MALIGNANT SQUAMOUS CELLS.

1. SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the European Bioinformatics Institute. The use by non-profit institutions as long a modified and this statement is not removed.
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                                                                                                                                                                                                                                                                                                                                                                                     PROSITE;
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HSSP; P01008; lATH.
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BL: U19556; AAA897552.1; -.

BL: U19558; AAA86317.1; JOINED.

BL: U19559; AAA86317.1; JOINED.

BL: U19560; AAA86317.1; JOINED.

BL: U19562; AAA86317.1; JOINED.

BL: U19567; AAA86317.1; JOINED.

BL: U19567; AAA86317.1; JOINED.

BL: U19569; AAA86316.1; JOINED.

BL: U19560; AAA86316.1; JOINED.

BL: U19560; AAA86316.1; JOINED.

BL: U19560; AAA86316.1; JOINED.

BL: U19560; AAA86316.1; JOINED.

BL: U19560; AAA86316.1; JOINED.

BL: U19560; AAA86316.1; JOINED.
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                                                                                                                                                                                                                                                                                           Similarity
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                                      GINMYVLLPE--NDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYL
                                                                                       MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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                         DLSMIVLLPNEIDGLQKLEEKLTAEKLMEWTSLQNMRETRVDLHLPRFKVEESYDLKDTL
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ilarity 41.5%;
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SEQUENCE FROM N.A.
MEDLINE-95241462; PubMed-7724531;
Schneider S.S., Schick C., Fish K.E., Miller E., Pena J.C.
Treter S.D., Hui S.M., Silverman G.A.;
A serine proteinase inhibitor locus at 18q21.3 contains duplication of the human squamous cell carcinoma antigen Matl. Acad. Sci. U.S.A. 92:3147-3151(1995).
                                                                                                                                                                                                                                                                                                                                                                            Strausberg R.;

Strausberg R.;

Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.

-I- FUNCTION: MAY ACT AS A PROTEASE INHIBITOR TO MODULATE THE HOST IMMUNE RESPONSE AGAINST TUMOR CELLS.

-I- SUBCELLULAR LOCATION: CYtoplasmic.
-I- SUBCELLULAR LOCATION: CYtoplasmic.
-I- TISSUE SPECIFICITY: SQUAMOUS CELLS.
-I- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                              uon-profit institutions as long as its content is modified and this statement is not removed. Usage by and from the requires a license agreement (See httm://
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1996
01-OCT-1996
15-JUN-2002
                                     EMBL;
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EMBL;
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EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Molecular cloning of human squamous cell carcinoma characterization of its promoter."; Biochim. Biophys. Acta 1518:124-131(2001).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barnes R.C., Worrall D.M.;
"Identification of a novel human
expression of leupin.";
FEBS Lett. 373:61-65(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE~96013887; PubMed=7589435;
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Mammalia; Eutheria;
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SERPINB4 OR SCCA2.
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L; U19570; AAA92602.1; JOINED.
L; U19571; AAA92602.1; JOINED.
L; U19572; AAA92602.1; JOINED.
L; U19574; AAA92602.1; JOINED.
L; U19575; AAA92602.1; JOINED.
L; U19575; AAA92602.1; JOINED.
L; U19575; AAA92602.1; JOINED.
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L; U19575; AAA97553.1; -...
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BC017401;
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carcinoma antigen 2 (SCCA-2) (Leupin).
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Catarrhini; Hominidae;
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Best Local
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TISSUE-Leukocyte;

MEDLINE-9220200; PubMed-1551869;

MEDLINE-92202200, Enghild J.J., Potempa J.;

"Equine leukocyte elastase inhibitor. Primary:

"Equine leukocyte elastase inhibitor. Primary:

identification as a thymosin-binding protein."

J. Biol. Chem. 267:6576-6583(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                     P05619;
01-NOV-1988 (Rel. 09, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Leukocyte elastase inhibitor (LEI).
                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE=93319507;
                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa;
Mammalia; Eutheria;
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Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN;
                                                                                                                                        SEQUENCE.
                                                                                                                                                                           "Molecular cloning and expression of an elastase inhibitor from horse leucocytes Biochem. J. 293:187-193(1993).
                                                                                                                                                                                                                                        Rose-John
                                                                                                                                                                                                                                                             Kordula
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Perissodactyla; Equidae;
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Pred. No. 3
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[SEQUENCE OF 343-362.
SEQUENCE OF 343-362.
MEDLINE-88213423; PubMed-3366785;
MEDLINE-88213423; PubMed-3366785;
Potempa J., Dubin A., Watorek W., Travis J.;
Potempa J., Dubin A., Watorek W., Travis J.;
Potempa J., Dubin A., Watorek W., Travis J.;
Potempa J., Dubin A., Watorek W., Travis J.;
Potempa J., Dubin A., Watorek W., Travis J.;
Sequence center ".
J. Biol. Chem. 263:7364-7369(1988).
                                                                                                                                      EMBL; M91161; AAA97513.1; -
PIR; A28060; A28060.
PIR; A37276; A37276.
PIR; A42421; A42421.
PIR; S34062; S34062.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X-RAY CRYSTALLOGRAPHY (1.95 ANGSTROMS).

X-RAY CRYSTALLOGRAPHY (1.95 ANGSTROMS).

MEDLINE-92389327; PubMed-1518052;

Baumann U., Bode W., Huber R., Travis J., Potempa J.;

Baumann U., Bode W., Huber R., Travis J., Potempa J.;

"Crystal structure of cleaved equine leucocyte elastase inhibitor determined at 1.95-A resolution.";

J. Mol. B1ol. 226:1207-1218(1992).

-I- FUNCTION: THIS INHIBITOR IS THOUGHT TO BE INVOLVED IN THE CONTI OF INTRACELLULAR PROTEIN TURNOVER. BINDS TO THYMOSIN BETA-4.

-I- SUBCELLULAR LOCATION: Cytoplasmic.

-I- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                        Serpin;
                                                                                                                                                                                                                                                                                                                                                                                                                        the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
  TURN
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InterPro; IPR000215; Serpin.
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1 BLOCKED (WITH AN UNKNOWN
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Best Local :
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                         Remold-0'Donnell E., Chin J., Alberts M.;
"Sequence and molecular characterization (
elastase inhibitor.";
Proc. Natl. Acad. Sci. U.S.A on ""
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                                                                                                                                      01-APR-1993 (Rel. 25, Created)
01-APR-1993 (Rel. 25, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Leukocyte elastase inhibitor (LEI) (Monocyte/neutrophil elastase inhibitor) (M/NEI) (EI).
SERPINB1 OR ELANH2 OR PI2.
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MEDLINE-98296265; PubMed-9630619;
Zeng W., Silverman G.A., Remold-O'Donnell E.;
                                                                                                 Mammalia;.Eutheria;
NCBI_TaxID=9606;
                                                                                                                    Eukaryota; Metazoa;
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                                                                                                                             Homo sapiens (Human)
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                                                                                                            Chordata; Primates;
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                                      89:5635-5639(1992)
                                                                                                            Craniata; Vertebrata; | Catarrhini; Hominidae;
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Best Local
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[3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Serpin; Serine protease inhibitor. ACT_SITE 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; M93056; -; NOT_ANNOTATED_CDS.

EMBL; AF053630; AAC33394.1; -.

EMBL; BC009015; AAC9015.1; -.

PIR; S27383; S27383.

HSSP; P05619; 1HLE.

Aarhus/Ghent-2DPAGE; 4314; IEF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000215; Serpin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Microsequences of 145 proteins recorded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: REGULATES THE ACTIVITY OF THE NEUTROPHIL PROTEASES ELASTASE, CATHEPSIN G AND PROTEINASE-3.
SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W; HGNC:3311; SERPINB1.
130135; ..
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                                                     294
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                                                                                                                                                                                                                                                                                                                                                       LYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYFKGK
LGVQDLFNSSKADLSGMSGARDIFISKIVHKSFVEVNEEGTEAAAATAGIATFCMLMPEE
                           LGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQST
                                                                                                                                                               LLPEN--
                                                                                                                                                                                                              WKDKFMKEATTNAPFRLNKKDRKTVKMMYQKKKFAYGYIEDLKCRVLELPYQGEELSMVI
                                                                                                                                                                                                                                                                   WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG-GINMYV
                                                                                                                                                                                                                                                                                                                        TYGADLASVDFQHASEDARKTINQWVKGQTEGKIPELLASGMVDNMTKLVLVNAIYFKGN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MASLAAANAEFCFNLFREMDDNOGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                                          LLPDDIEDESTGLKKIEEQLTLEKLHEWTKPENLDFIEVNVSLPRFKLEESYTLNSDLAR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           379 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                         -DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74;
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4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 722.5;
Pred. No. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REACTIVE BOND (BY SIMILARITY).; BAAE08DFCBCD8CD3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Puype
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SB13_HUMAN
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                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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15-JUN-2002 (Rel. 41, Last annotation update)
Hurpin (HaCaT UV-repressible serpin) (Protease
(Headpin) (Serpin B13).
SERPINB13 OR PI13.
Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebr
Mammalia; Butheria; Primates; Catarrhini; Homin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Sequence, organization, chromosomal localization and splicing of the human serine protease inhibitor gene which is up-regulated in psoriasis.";
DNA Cell Biol. 20:123-131(2001).

-i- FUNCTION: May play a role in the proliferation or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDILINE-99430001; runner spring P., Nakashima T., Frederick M., Hender Spring P., Nakashima T., Frederick M., Hender "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and cDNA cloning of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company of headpin," "Identification and company o
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. (ISOFORM 1), MEDLINE-20461850; PubMed=11004515; Nakashima T., Pak S.C., Silverman Clayman G.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Abts H.F., Welss T.,
Bird P.I., Ruzicka T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            expressed serpin that maps to chromosome 18q."; Biochem. Biophys. Res. Commun. 264:299-304(1999)
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16-OCT-2001 (Re
                                EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-Placenta;
MEDLINE-21213570;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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MEDLINE=99458661; PubMed=10527881;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Cloning and characterization skin specific, UV-repressible ovalbumin serpin family.";
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Abts H.F., Welss T
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                                                                                                                                                                                                                                                                                                                                                                                 SUBCELLULAR LOCATION: Cytoplasmic.
ALTERNATIVE PRODUCTS: 2 isoforms; 1 (shown here) and produced by alternative splicing.
TISSUE SPECIFICITY: SKIN-SPECIFIC.
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of keratinocytes.
AJ001696;
AJ001697;
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iol. 293:29-39(1999).
CAA04935.
CAA04936.
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21-JUL-1986 (Rel. 01,
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PROSITE; PS00284; SERPIN; 1.
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                                                     Eukaryota; Metazoa; Chordata; Archosauria; Aves; Neognathae;
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           PubMed=7122240;
                                                   Chordata; Craniata; Vertebrata; Euteleostomi;
Neognathae; Galliformes; Phasianidae; Phasiani
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Bos taurus (Bovine).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pec

Pecora;

Bovoidea;

Euteleostomi;

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Nucleic Acids Res. 10:4363-4382(1982).
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-S
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                                                                                                                     STLFRADHPFLFVIRKD--DIILFSGKVSCP
                                                                                                                                                                                  SMLVLLPDEVSGLERIEKTINFDKLREWTSTNAMAKKSMKVYLPRMKIEEKYNLTSILMA
                                                                                                                                                                                                                                                                                                         NMYVLLPE--NDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA:| | | | : | : | : | : | : | : | : | | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CARKFYTGGVEEVNFKTAAEEARQLINSWVEKETNGQIKDLLVSSSIDFGTTMVFINTIY
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Pred. No. 1.4e
75; Mismatches
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1. No. 1.4e-42;
1. No. 14e-42;
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RESULT 11
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Best Local S
Matches 152
P80229;
01-OCT-1993
01-OCT-1993
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HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entropean Bioinformatics Institute. There are no rest use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content modified and this statement is not removed. Usage by and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00284; SERPIN; 1.
Serpin; Serine protease inhibitor
ACT_SITE 343 344 REAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brain Res. Mol. Brain Res. 42:293-300(1996).
-I- FUNCTION: MAY BE INVOLVED IN THE REGULATION OF SERINE
PRESENT IN THE BRAIN OR EXTRAVASATED FROM THE BLOOD.
-I- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              proteinases. M
Brain Res. M
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                                         ILEU_PIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entities requires a license agreement
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                                                                                                                     ANHPELFFIQHSKTGAILFCGRFCSP
                                                                                                                                               ADHPFLFVIR--KDDIILFSGKVSCP
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39.4%;
Created)
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3; Mismatches
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PAIZ_HUMAN
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Best Local :
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MOD_RES 1
DISULFID 80
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SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Teschauer W.F., Mentele R., Sommerhoff C.P.;
"Primary structure of a porcine leukocyte serpin.";
Eur. J. Biochem. 217:519-526(1993).
-i- FUNCTION: REGULATES THE ACTIVITY OF THE NEUTROPHIL PROTELASTASE, CATHEPSIN G AND PROTEINASE-3 (By similarity).
-i- SUBUNIT: HOMODIMER; DISULFIDE-LINKED.
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Mammalia; Eutheria;
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HSSP; P05619; 1HLE.
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MEDLINE=94039085; PubMed=7901009;
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378 AA;
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REACTIVE BOND (BY SIMILARITY).
; 3CA7C65F11E508CA CRC64;
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Pred. No. 1
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PAI2_HUMAN S P05120; Q96E96; 13-AUG-1987 (Rel 01-FEB-1996 (Rel

STANDARD;

PRT;

415

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Plasminogen plasminogen

15-JUN-2002

(Rel. 05, Created)
(Rel. 33, Last sequence update)
(Rel. 41, Last annotation update)
activator inhibitor-2 precursor (
activator inhibitor) (Monocyte Ar

(Monocyte Arg-serpin)

(PAI-2) (Placental

(Urokinase

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SEQUENCE .....
TISSUE-Monocytes;

MEDLINE-88125032; PubMed-3257578;

Antalis T.M., Clark M.A., Barnes T., Lehrbach P.R., De Schevzov G., Goss N.H., Stephens R.W., Tolstoshev P.;

"Cloning and expression of a cDNA coding for a human replasminogen activator inhibitor.";

plasminogen activator inhibitor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Monocytes;

MEDLINE=87252928; PubMed=3496414;

Webb A.C., Collins K.L., Snyder S.F., Alexander S.J.,

ROSenwasser L.J., Eddy R.L., Shows T.B., Auron P.E.;

"Human monocyte Arg-Serpin cDNA. Sequence, chromosomal assignment,
and homology to plasminogen activator-inhibitor.";

J. Exp. Med. 166:77-94(1987).
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MEDLINE-87137674; PubMed-3029122;
Ye R.D., Wun T.-Z., Sadler J.E.;
"cDNA cloning and expression in Escherichia activator inhibitor from human placenta.";
J. Biol. Chem. 262:3718-3725(1987)
X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS)
MEDLINE-99148112; PubMed-10368272;
Harrop S.J., Jankova L., Coles M., Ja
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ye R.D., Ahern S.M., le Beau M.M., Lebo R.V., Sadler J.E.; "Structure of the gene for human plasminogen activator inhibitor-2. The nearest mammalian homologue of chicken ovalbumin."; J. Biol. Chem. 264:5495-5502(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   during phorbol ester-mediated diffe histiocytic lymphoma cells."; mol. Cell. Biol. 7:4564-4567(1987).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human
Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE-90152678; PubMed-2303256;
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                                                                                                                                       Vandekerckhove J.
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.B. Jr., Webb A.C.;
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PIR; A29362; A29362.
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-!- SUBCELLULAR LOCATION: Cytoplasmic FAMILY. OV-SERPIN SUBFAMILY.
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY.
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01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Cytoplasmic antiproteinase 2 (CAP2) (CAP-2) (Protease inhibitor
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Serpin; Serine protease inhibitor
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"Molecular cloning of bomapin (protease inhibitor 10), a novel hum:
serpin that is expressed specifically in the bone marrow.";
J. Biol. Chem. 270:26754-26757(1995).
-!- FUNCTION: MAY PLAY A ROLE IN THE REGULATION OF PROTEASE
ACTIVITLES DURING HEMATOPOIESIS.
-!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
-!- TISSUE SPECIFICITY: EXPRESSED SPECIFICALLY IN THE BONE MARROW.
-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fo entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a coefficient the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict
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01-FEB-1996 (Rel. 33, Last seq
15-JUN-2002 (Rel. 41, Last ann
                                      EMBL; U35459;
HSSP; P05619;
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Mammalia; Eutheria;
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           Genew; HGNC:
MIM; 602058;
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                                         1HLE
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Primates;
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Pred. No. 3.4e-39;
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Catarrhini;
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SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
SerPin; Serine protease inhibitor.
ACT_SITE 362 363
SEQUENCE 363
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P01012;
P01012;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
Ovalbumin (Plakalbumin) (Allergen Gal
                                                                                                          SEQUENCE FROM N.A.

MEDLINE-78199842; PubMed-661981;

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Brownlee G.G., O'Malley B.W.;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHICK
                SEQUENCE FROM N.A.
MEDLINE-79010682; PubMed-692731;
Catterall J.F., O'Malley B.W., R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken)
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a; Aves; Neognathae; Galliformes; Phasianidae;
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  Brownlee G
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EMBL; EMBL; EMBL; EMBL; EMBL; EMBL;

J00895; V00438; V00383; V00383; M34352; M34346; M34347; M34348;

AAB59956.1; CAA23716.1; CAA23682.1; AAA48998.1; AAA48998.1; AAA48998.1; AAA48998.1;

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"Nucleotide sequence homology chick ovalbumin gene.";
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Palmiter '-- a secreted protein without
                                                                                                                                                                             This
                                                                                                                                                                                                                                                                                                                                                             ovalbumin. Its relationship to proteinase inhibitor.";
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                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=90278960; PubMed=2352279; Wright H.T., Qian H.X., Huber R.; "Crystal structure of plakalbumin, a provalbumin Transaction".
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MEDLINE-92046044; PubMed-1942038;

Stein P.E., Leslie A.G.W., Finch J.T., Carrell R.W.;

"Crystal structure of uncleaved ovalbumin at 1.95-A.
J. Mol. Biol. 221:941-959(1991).
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Stein P.E., Lesli
Carrell R.W.;
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MEDLINE=90370102; PubMed=2395463;
Stein P.E., Leslie A.G.W., Finch J.T.,
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MEDLINE=79186958;
Thompson E.O.P., I
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MEDLINE=79186957;
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                                                                                                                                                                                         TISSUE SPECIFICITY: Major protein of egg white.
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAM
DATABASE: NAME-Worthington enzyme manual;
MWM-"http://www.worthington-blochem.com/manual/0/0A.html".
                                                                                                                         SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way field and this statement is not removed. Usage by and for commercial
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Search completed: July 11, 2003, 11:55:22 Job time: 37.341 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

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SUMMARIES

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ALIGNMENTS

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[2] SEQUENCE FROM N.A.	Nature 409:685-690(2001).	"Functional annotation of a rull-length mouse cDNA collection.";	6.11	., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,	Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,	Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch KF.,	Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,	Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,	Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,	Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,	Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,	Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,	Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,	Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,	Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,	kazaki Y., Gojobori T., Bono H., Kasukawa T., Saito	Nishi K., Kiyosawa H., Kondo S., Yamanaka	Konno H., Adachi J., Fukuda	Kawai J., Shinaqawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,	MEDLINE=21085660; PubMed=11217851;	SEQUENCE FROM N.A.	[1]		Rodentia; Sciurognathi; Muridae;	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Mus musculus (Mouse).	SERPINB7 OR 4631416M05RIK.	4631416M05Rik protein (Megsin).	(TrEMBLrel. 21, Last annotation	(TrEMBLrel. 17,	Q9D695; 01-JUN-2001 (TrEMBLrel. 17, Created)	Q9D695 PRELIMINARY; PRT; 380 AA.	F

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Best Local
       SEQUENCE FROM N.A.

MEDLINE-21368006; PubMed=11473647;

MARIAGRAY MAINT TO THE SERPIN FAMILY.

SEQUENCE FROM N.A. Inagi R., Kurokawa K.;.

"Cloning of rodent megsin revealed its up-regular mesangioproliferative nephritis.";

Kidney Int. 60:641-652(2001).

FIGURE TO THE SERPIN FAMILY.

EMBL; AF105329; AAL16765.1;

Interpro; IPR000215; Serpin.
                                                                                                                                                              Q920J5;
01-DEC-2001
01-DEC-2001
01-MAR-2002
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Mangaku M., Miyata T., Suzuki D., Umezono T., Hashimc Yagi M., Nagano N., Inagi R., Kurokawa K.;
"Cloning of rodent megsin revealed its up-regulation mesangioproliferative nephritis.";
Kidney Int. 60:641-652(2001).
EMBL; AK014524; BAB29410.1; -.
EMBL; AF105328; AAL16768.1; -.
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Mammalia; Eutheria;
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SMART; SM00093; SERPIN; 1.
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                                                                                                                                                              (TrEMBLrel. 19, (TrEMBLrel. 19, (TrEMBLrel. 20,
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                                                                                                                        s (Rat).
Da; Chordata;
ia; Rodentia;
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73.9%;
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Last
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Pred. No. 1.2e-95;
                                                                                                                        Craniata; Vertebrata;
Sciurognathi; Muridae;
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Query Match
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01-DEC-2001
01-JUN-2002
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Q91Z12;
                                                                                                                                                         Serpin.
SEQUENCE
                                                                                                                                                                                              Submitted (JUL-2001) to the EMBI -: SIMILARITY: BELONGS TO THE SEMBL; BC010313; AAH10313.1; -: MGD; MGI:1914207; 2310046M08Rik. InterPro; IPR000215; Serpin.
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Serpin.
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2310046M08RIK.
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                                                                MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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DSFSGVLKAKTKNSSECSQVGMMHPDFRALISHINQQNSLSVANRIYGTRSISFHKQYVR
                                                   MDPITTASTEFCLDVFKELSSNNVGENIFFSPLTTFYALSMLLLGTRGKSAEQMEKVLHY
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Rodentia;
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Pred. No. 3.6e
81; Mismatches
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Pred. No. 1.8e
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               -SH--KDYDLSIVNGLFAEKVYGFHKDYIE
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RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Kawai J., Shinagawa A., Shibata K., Konno H., Adachi J., Fukuda S.,
RA Arakwa T., Hara A., Fukunishi Y., Konno H., Kasukawa T., Saito R.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Aizawa K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Biake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kaniya M., Lee N. H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kaniya M., Lee N. H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storich K.-F.,
RA Sasaki H., Sato K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Havashizaki Y.;
RA Havashizaki Y.;
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                                                 Query Match
Best Local
                                 Matches
                                                                                                          Nature 409:685-690(2001).
EMBL; AK009855; BAB26546.1; -
EMBL; AK009003; BAB26017.1; -
HSSP; P05619; IHLE.
HGD; MGI:1914207; 2310046M08R1k.
InterPro; IPR000215; Serpin.
Pfam; PF00079; Serpin; 1.
SMART; SM00093; SERPIN; 1.
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01-JUN-2001
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01-JUN-2002
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                           "Functional annotation of a full-length mouse cDNA
                                                                                                                                                                                                                                                             Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
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                                                 Similarity
 MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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                                Conservative
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AA; 43482 MW;
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                                             Score 798; DB 11;
Pred. No. 4.9e-47;
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                                Mismatches
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Mammalia; Eutheria;
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XX MEDLINE-21005660; PubMed-11217851;
XX MEDLINE-21005660; PubMed-11217851;
XX MARTINE-21005660; PubMed-11217851;
XX Mayan I., Shinagawa A., Shibata K., Konno H., Adachi J., Fukuda S.,
XX Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
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XX Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
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XX Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
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XX Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
XX Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
XX Gustincich S., Ringwald M., Rodriguez I., Sakamoto N.,
XX Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
XX Sasaki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
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XX Mynshaw-Borls A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                           "Functional annotation of a full-length mouse Nature 409:685-690(2001).

--- SIMILARITY: BELONGS TO THE SERPIN FAMILY.
EMBL; AK009018; BAB26028.1; --
HSSP; PO5619; 1HLE.
MGD; MGI:1919119; 2300003F07Rik.
InterPro; IPR000215; Serpin.
                   Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1
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RESULT

QPD154

AC QS

AC QS

DT DT QS

OC DT QS

RN QS

RR QS M

RR QS M

RR QS M

RR QS M

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RR QS M

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XX MEDIANE-2108560; PubMed-11217851;
XX MEDIANE-2108560; PubMed-11217851;
XX MEDIANE-2108560; PubMed-11217851;
XX MARIANE, Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
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XX Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
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XX Kadota K., Matsuda H.A., Ashburner M., Baldarelli R., Barsh G.,
XX Kuehl P., Lewis S., Matsud T., Nono H., Baldarelli R., Barsh G.,
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01-JUN-2001
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SEQUENCE
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Mammalia; Eutheria;
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01-JUN-2002 (TYEMBLEE). 21, Last anotation update)
119005M04Rik protein (RIKEN cDNA 1190005M04 gene)
SERPINB1A OR 1190005M04RIK OR SERPINB1.
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EMBL; BC011140; AAH11140.1; -
EMBL; AF426024; AAL57486.1; -
HSSP; P05619; 1HLE.
MGD; MG1:1913472; Serpinbla.
InterPro; IPR000215; Serpin.
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Genomics 0:0-0(2002).
-!- SIMILARITY: BELONGS TO TH
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Ragoussis J., Biro
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Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Comparison of human chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                            al Similarity
145; Conserv
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                                                                                     LGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQST
                                                                                                                                                                                                               WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGG-INMYV
                                                                                                                                                                                                                                                             MYGADLAPVDELHASEDARKEINQWVKGQTEGKIPELLSVGVVDSMTKLVLVNAIYFKGM
                                                                                                                                                                                                                                                                                                                                               NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK
                                                                                                                                                                                                                                                                                                                                                                                                                            MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
EFTVDHPFIFFIRHNPTSNVLFLGRVCSP
                              LFRADHPELFVIRKDDI - - ILFSGKVSCP
                                                                                                                               LLPKDIEDESTGLKKIEKQITLEKLLEWTKRENLEFIDVHVKLPRFKIEESYTLNSNLGR
                                                                                                                                                              LLPEN----
                                                                                                                                                                                              WEEKFMTEDTTDAPFRLSKKDTKTVKMMYQKKKFPFGYISDLKCKVLEMPYQGGELSMVI
                                                                                                                                                                                                                                                                                            LYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYFKGK
                                                                LGVQDLFSSSKADLSGMSGSRDLFISKIVHKSFVEVNEEGTEAAAATGGIATFCMLLPEE
                                                                                                                                                                                                                                                                                                                                                                                             MEQLSSANTLFALELFQTLNESSPTGNIFFSPFSISSALAMVILGAKGSTAAQLSKTFHF
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Denny P., Coo
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aggs S., Scarff K.L.,
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                                                                                                                                                  -DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRA
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Benarafa C.,
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Remold-O'D
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'Donnell E.,
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Best Local S
Matches 152
                                                                                                            Q90758;
Q90758;
Q1-JUN-2001 (TrEMBLrel. 17, Cre
Q1-JUN-2002 (TrEMBLrel. 21, Las
Q1-JUN-2002 (TrEMBLrel. 21, Las
Q1-JUN-2002 (TrEMBLrel. 21, Las
Q19005MO4RIK protein,
SERPINBIA OR 119005MO4RIK,
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; C.
Mammalia; Eutheria; Rodentia; S.
NCBL_TaxID=10090;
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SART; SM00093; SERPIN; 1.

PROSITE; PS00435; PEROXIDASE_1; UNKNOWN_1.

PROSITE; PS00284; SERPIN; UNKNOWN_1.

SEQUENCE 382 AA; 42887 MW; 35CBB6ADF677C8DB
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"Comparison of human chromosome 6p25 with murine a greatly expanded Ov-serpin gene repertoire in t Genomics 0:0-0(2002).

EMBL: AF46025; AAL57487.1; -.

InterPro; IPR000215; Peroxidase.

InterPro; IPR000215; Serpin.
  SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-STOMACH;
MEDLINE-2108560; Pubmed-11217851;
Kawai J., Shinagawa A., Shibata K.
                                                                                                                                                                                                                                                                                                                                                                Q9D7S8
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Mammalia; Eutheria;
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Rodentia;
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Cooley J., Benarafa C., Remold-O'Donnell
                                                                                                                                                                                                                                                              Created)
Last sequence update)
Last annotation updat
                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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  Yoshino M.,
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  Ishii Y.,
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RESULT
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ID QS
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RA AIZAWA K., IZAWA M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavent T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavent T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kochimi L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schrimi L.M., Staubli F., Suzuki R., Tomita M., Wagner L.,
RA Sakii K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Hyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Hyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Sasaki H., Sato K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Hayushi-Raki Y.; Storch R., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayushi-Raki Y.;
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01-JUN-2001
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Functional annotation of a full-length mouse
"Functional annotation of a full-length mouse
"I survey 409:685-690(2001).
"I SIMILARITY: BELONGS TO THE SERPIN FAMILY.
EMBL; AK008914; BAB25964.1; -.
HSSP; P05619; 1HLE.
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Best Local
[1]
SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=EMBRYO;
STRAINE=21085660; PubMed=11217851;
MEDLINE=21085660; PubMed=11217851;
Kawai J., Shinagawa A., Shibata K., Yoshino M.
Kawai J., Hara A., Fukunishi Y., Konno H.,
Arakawa T., Hara M., Nishi K., Kiyosawa H., F
                                                                                                                                                                                                                                                                                    Q9D1Q5 PRELIMINARY; PRT; 387 AA.
Q9D1Q5;
Q1-JUN-2001 (TrEMBLrel. 17, Created)
O1-JUN-2001 (TrEMBLrel. 17, Last sequence update)
O1-JUN-2002 (TrEMBLrel. 21, Last annotation update)
18 days embryo cDNA, RIKEN full-length enriched library,
clone:1110001H02, full insert sequence.
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SMART; SM00093; SERPIN;
PROSITE; PS00284; SERPIN
                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
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Submitted (JUL-2000) to the Submitted HELONGS TO EMBL; AB046400; BAB40773.1;
HSSP; P01008; 1ATH.
                                                                                                                                                                               NCBI_TaxID=10090
                                                                                                                                                                                                                                                Mus musculus
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[1]
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Mammalia; Eutheria;
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Y., Kishi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TNEEFCCNHPFLFFIRQNKTNSILFYGRFSSP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MNSLSEANTKFMFDLFQQFRKSKEN-NIFYSPISITSALGMVLLGAKDNTAQQISKVLHF
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                                                                                                                                                                                                                                             (Mouse).
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Rodentia;
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Primates;
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39.0%;
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tigen Transcripts Produced |
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Pred. No. 6e-4
32; Mismatches
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                                                                                                                                                                                                   Craniata; Veri
Sciurognathi;
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                                                                     Yoshino M.,
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                                                                                                                                                                                                   Vertebrata; :
thi; Muridae;
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                      M., Itoh M., Ishii
Adachi J., Fukuda
Kondo S., Yamanaka
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                                                                                                                                                                                                     Murinae:
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RESULT 008804 ID 00 OC MC OC M SI 00 OC M M

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Last Last NK13. Created)

sequence update) annotation updat

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04, 19, 21,

Eukaryota; Mammalia; E

; Metazoa; Eutheria;

Chordata; Rodentia;

Craniata; Ver Sciurognathi;

Vertebrata; thi; Muridae;

Euteleostom1;

Mus

Mus musculus

(Mouse)

008804; 01-JUL-1997 01-DEC-2001 01-JUN-2002

(TrEMBLrel. PRELIMINARY;

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Best Local S
Matches 143
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Nature 409:685-690(2001).

-!- SIMILARITY: BELONGS TO THE SERPIN FAMILY.

EMBL; AK003220; BAB22650.1; -.

HSSP; P05120; 1BY7.

MGD; MGI:1277952; Scca2.

InterPro; IPR000215; Serpin.

Pfam; PF00079; serpin; 1.

SMART; SM00093; SERPIN; 1.

PROSITE; PS00284; SERPIN; 1.
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                                                                                        LGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQST
                                                                                                                                                                NMYVLLPE--NDLSEIENKLTFQNLMEWTNPRRWTSKYVEVFFPQFKIEKNYEMKQYLRA
                                                                                                                                                                                                                                                                                                             CAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVY 176
                                                                                                                                                                                                                                                                                                                                                                                                                                  MASLAAANAEFCENLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLH-
                                   LFRADHPFLFVI--RKDDIILFSGKVSCP
                                                                                                                                             SMFVLLPMEIDGLKQLEEQLTTDKLLEWIKAENMHLTELYLSLPRFKVEEKYDLQVPLEH
                                                                                                                                                                                                                                       FKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG-GI
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                                                                     MGMVDAFDPQKADFSGMSSIPGLVVSKVLHKSFVEVNEEGTEAAAATGVEVSVRSAQIAE
                                                                                                                                                                                                                    FKGQWNRKFNENHTREEKFWLNKNTSKPVQMMKQRNKFNFSFLGDVHAQIVEIPYKGKDL
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Pred. No. 2.3e-39;
1; Mismatches 144
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SPI3L2:
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SPI3L2:
Eukaryota; Metazoa; C
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SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN;
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"Comparison of human chromosome 6p25 v
                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                            DIFDESKADLSGTASGGRLYISRMMHKSYIEVTEEGTEATAATGSNI-VEKQLPQSTLFR
                                                                                                                                                                                                                                          HEKOFNKEDTQEMPFNVTKDVVKPVQMMFQKSTFKMTYVEEISTNILLLPYVGNELNMII
                                                                                                                                                                                                                                                     WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGG-INMYV
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                                                                                                                                            ADHPFLFVIR--KDDIILFSGKVSCP 380
                                                                                                                                                                 DAFEEGMADFSGIASKEGLFLSKVIHKSFVEVNEEGTEAAAATAANIGFRCMVP---YFC
                                                                                                                                                                                                                MASLAAANAEFCFNLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
                                                                                                                           ANHPELFFIQHSRTSGIVFCGRESSP
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                                      (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                            PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      42535 MW;
  Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                         34.98;
                                                                                                                                                                                                                                                                                                                      -GFQSLL---
                                       20,
21,
                                                                                                                                                                                                                                                                                                                                                                                                 76;
                                      Last sequence update)
Last annotation updat
                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                       Score 684.5; DB
Pred. No. 3e-39;
  Craniata; Vertebrata;
                                                                             PRT;
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Benarafa C.,
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Remold-O'
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  Euteleostomi;
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Best Local S
Matches 156
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Q9Z2G2;
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MEDLINE-99047536; PubMed
Bartuski A.J., Kamachi Y
Silverman G.A.;
"A murino
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Pfam; PF00079; serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; UNKNOWN_1.
PROSITE; PS00284; SERPIN; 0820A8A26AEBB485 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a Greatly Expanded Ov-Serpin Gene Repertoire in the Mouse."; Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AF425084; AAL65910.1; ... InterPro; IPR0000215; Serpin.
                                                                                                                                                                                                                                                         01-MAY-1999 (TrEMBLrel. 10, Crea
01-MAY-1999 (TrEMBLrel. 10, Last
01-DEC-2001 (TrEMBLrel. 19, Last
Squamous cell carcinoma antigen
"A murine ortholog of the human serpin inhibits chymotrypsin-like serine prote Genomics 54:297-306(1998).
                                                                                                                                                                                    Mus musculus (Mouse)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kaiserman D., Knaggs S., Scarff K.L.,
McKeone R., Denny P., Cooley J., Bend
Raggussis J., Bird P.I.;
"Comparison of Human Chromosome 6p25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A
STRAIN=B6D2 F1/J;
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[1]
                                                                                                                                                                  NCBI_TaxID=10090;
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machi Y., Schick
                                                                                                                                                                                Chordata;
Rodentia;
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Cooley J., Bena
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Last annotation update)
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Pred. No. 3.1e-39;
5; Mismatches 140;
                                                                                                                                                                                  Craniata; Ver
Sciurognathi;
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   SERPIN FAMILY
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ırafa C.,
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                                                                                             Massa
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thi; Muridae;
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                                                                                             Trask
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                                                         chromosome
                                                                                                                                                                                       Murinae;
                                                                                             В.J.,
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      Query Match
Best Local S
Matches 138
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Best Local S
Matches 147
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HSSP; P05120; 1BY7
MGD; MGI:1277952;
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01-AUG-1998
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073860;
                                                                                                                                     Serpin.
SEQUENCE
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Meleagris gallopavo (Common turkey).
Meleagris gallopavo (Common turkey).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrididae; Meleagrid
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.

Roberts M.C., Butt A.T., Schenkel E.F., Wong E
"Turkey ovalbumin cDNA.";

Submitted (MAY-1998) to the EMBL/GenBank/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Archosauria; Ave
NCBI_TaxID=9103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ovalbumin
                                                                                                                                                                                              PROSITE; PS00284;
                                                                                                                                                                                                                                                                                                   InterPro; IPR000215; Serpin.
                                                                                                                                                                                                                                                                                                                                    HSSP; P01012; 10VA
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                                                                                                                                                                                                                                                                                                                                                               !- SIMILARITY: BELONGS TO :
MBL; AF064546; AAC16664.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14
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                                                                                                                                                                                                                                PF00079; serpin; 1. ; SM00093; SERPIN; 1.
          11 Similarity
138; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          al Similarity 37.4
147; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YEKGQWNHKEDEKHTTEEKEWLNKNTSKPVQMMKQNIEFNEMELEDVQAKIVEIPYKGKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YFKGKWQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNG-G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EDIKEYYQANVESLDFEHAAEESEKKINSWVESQTNGKIKDLFPNGSLNRSTIMVLVNAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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1BY7.
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                                                                                                                                                                                                  SERPIN; UNKNOWN_1
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33.8%; Score 663; DE 35.1%; Pred. No. 9.46 Live 93; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        34.88;
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Pred. No. 4.7e-39;
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                                 DB 13;
9.4e-38;
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
18 days embryo cDNA, RIKEN full-length enriched lib
clone:1110013A16, full insert sequence.
                                                                  Nature 409:685-690(2001).
-!- SIMILARITY: BELONGS TO EMBL; AK003650; BAB22916.1; HSSP; P05120; 1BY7.
      InterPro;
                                       MGD; MGI:1277952;
                                                                                                                                                                                                Hayashizaki Y.; "Functional annotation of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=21085660; PubMed=11217851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=C57BL/6J; TISSUE=EMBRYO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15
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Rodentia;
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SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; 1.
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SEQUENCE 386 AA; 44313 MW; 2A3CFA78A73AD004 CRC64;
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Search completed: July 11, 2003, 11:59:12 Job time: 167.904 secs

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Result
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AT TCHMENTS	US-09-724-059-152932	-09-724-059-15137	-US01-29288-140	-10-219-999-59	-08-384-032-4	-08-172-528A-	-08-070-689A-5	-08-091-028A-	08-091-028-1	S-60-191-681-724	-60-191-637-92	-60-173-464-749	-60-167-245-386	-09-791-537-126	-09-614-150-9252	-60-191-681-106	-60-191-637-1355	-60-167-245-514	-09-791-537-13	09-614-150-1351	-10-110-030-4	-09-936-883A-	-09-508-997A-	-60-096-409-1	-10-179-131-7	-09-248-796-14712	-09-724-059-17393	-09-724-059-	-09-724-059-16901	-09-724-059-16673	S-09-724-059-16397	S-09-724-059-16169	-09-724-059-15917	S-09-724-059-15665	S-09-724-059-15425	S-09-724-059-15173	S-10-110-030-2	-10-091-442-	936-883A-
	equence	Sequence 151372	quence 140	55	equence 4,	equence 13,		equence 1,	1,	equence 72	9281,	74	386,	126235	9252, A	equence 10688,	equence 13559,	e 514, Ap	"	1351	4, 2			1471	7804	14712,	1739	1714	690	1667	e 1639	e 1616	e 1591	equence 1566	e 1542	equence 151732	equence 2, Appl	e 34. Ap	, Appl

ALIGNMENTS

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Sequence 1, Application US/09140719

Sequence 1, Application US/09140719

GERAL INFORMATION:

APPLICANT: TSUJIMOTO, Masafumi
APPLICANT: IWASA, Fuyuki
APPLICANT: IWASA, Fuyuki
APPLICANT: IWASA, Fuyuki
APPLICANT: MIURA, Kenju
APPLICANT: MIURA, Kenju
APPLICANT: YAMACOCHI, NOZOMi
ITITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34

CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker 6 Mathis
STREET: P.O. Box 1404
CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ID: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/140,719
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US-10-091-442-1
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FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
PRIOR APPLICATION UMBER: JP 4-212305
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TYPE: amino acid
STRANDEDNESS: single
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                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                      PRIOR APPLICATION DATA:
                                                                                       SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
                                 APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: Unknown>
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APPLICATION NUMBER: US/09/140,719
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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Pred. No.
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                                                                                                            Version #1.30
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US-08-091-028A-34
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                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5
FILING DATE: 04-MAR-1993
                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4
FILING DATE: 17-JUL-1992
 ATTORNEY/AGENT INFORMATION:
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APPLICANT: NAKAZATO, Hiroshi
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                                                                                                                                            APPLICATION NUMBER: US/08/091,028A FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                         STATE: Virginia COUNTRY: United States
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                                                                                                                             CLASSIFICATION:
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TYPE: amino acid
STRANDEDNESS: single
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REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
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ULE TYPE: peptid
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YAMAICHI, Kozo
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                                   JP 5-067339
                                                                                         JP 4-212305
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Pred. No. 4.2e+06;
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Length 9; Indels

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Matches

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Best Local Similarity
Matches 9; Conserv
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-UUL-1992
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
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TELECOMMUNICATION INFORMATION:
                                  TELECOMMUNICATION INFORMATION:
                                                                                                        APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: US 01
FILING DATE: 14-JUL-1993
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                                                     NAME: MCGOWAN, MALCOLM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: United States ZIP: 22313-1404
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                  TELEPHONE:
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ilarity 100.0%;
Conservative (
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TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
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YAMAICHI, KOZO
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(703) 836-6620
703) 836-2021
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Pred. No. 1
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Query Match
Best Local Similarity
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                                                                                                              US-09-791-537-281
                                                                                                                                                                                                                                                                                                                                                             US-09-791-537-281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens US-09-508-997A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-508-997A-2
                                                                                                                                      SOFTWARE: PatentIn version 3.0
SEQ ID NO 281
LENGTH: 380
TYPE: PRT
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SEQ ID NO 2
LENGTH: 380
TYPE: PRT
                                                                    Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                            Sequence 281, Application US/09791537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local 9
                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                  APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/508,997A CURRENT FILING DATE: 2000-06-27 PRIOR APPLICATION NUMBER: JP 09-275302 PRIOR FILING DATE: 1997-09-22
                                                                                                                                                                                                 CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/791,537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: MIYATA, Toshio TITLE OF INVENTION: Megsin Protein FILE REFERENCE: SHIM-004
                                                                                                                                                                                                                                           FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                APPLICANT: Bionomix, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 44
                                                                                                                          ORGANISM: Homo sapiens
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LENGTH: 380 amino acids
                                                     Local Similarity hes 9; Conserv
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188 SETINCHFK 196
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9; Conserva
                          1 SETINCHFK 9
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Pred. No.
                                                                    Score 52; DB
Pred. No. 1.1;
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Pred. No.
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RESULT 8
US-10-091-442-34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
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TYPE: PRT
ORGANISM: Homo sapiens
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YAMAGUCHI, NOZOMİ
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SETINCHFK 196
                                                                                                                                                                                                            APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Burns, Doane, STREET: P.O. Box 1404
                                                                      APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
                                                                                                                                                                                          CLASSIFICATION: <Unknown>
                                                      FILING DATE: 14-JUL-1993
                                      APPLICATION NUMBER: JP 4-212305
                                                                                                                                                                          APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10091442
                      ILING DATE:
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YAMAICHI, Kozo
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TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
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JP 6-067339
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Pred. No.
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                                                                                                                                                                                                                                                                        Version #1.30
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                                                                                                                                                                                                                                                                                          RESULT 10
US-09-724-059-151732
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                               SOFTWARE: MacAllLister
SEQ ID NO 151732
LENGTH: 23
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                                                                                                                                   APPLICANT: Choo, Yen
APPLICANT: Klug, Aaron
APPLICANT: Isalan, Mark
TITLE OF INVENTION: Nucleic Acid Binding Proteins
FILE REFERENCE: P2500USM
CURRENT APPLICATION UNMBER: US/09/724,059
CURRENT FILING DATE: 2000-11-28
                                                                                                     PRIOR APPLICATION NUMBER: GB9710809.6 PRIOR FILING DATE: 1997-05-23
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                   TYPE: PRT
                                                                                     NUMBER OF SEQ ID NOS: 1407122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS:
ORGANISM: Artificial sequence
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INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
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nes 9; Conserv
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                                                                                                                                                                                                                                                                                                                                                              188
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REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
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Pred. No. 1.1;
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Pred. No.
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US-09-724-059-154252
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; OTHER INFORMATION: Polypeptide sequence
US-09-724-059-151732
      S
                                                                                                       ; OTHER INFORMATION: Polypeptide sequence US-09-724-059-156652
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US-09-724-059-156652
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Best Local Similarity bo...
Conservative
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PRIOR FILING DATE: 1997-05-23
NUMBER OF SEQ ID NOS: 1407122
SOFTWARE: MACAILLISTER
SEQ ID NO 154252
LENGTH: 23
TYPE: PRT
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Best Local 9
                                                         Query Match
Best Local :
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                                         Matches
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PRIOR FILING DATE: 1997-05-23
NUMBER OF SEQ ID NOS: 1407122
SOFTWARE: MBCAllLister
SEQ ID NO 156652
LENGTH: 23
                                                                                                                                                                                                                                                                                      APPLICANT: Klug, Aaron
APPLICANT: Isalan, Mark
TITLE OF INVENTION: Nucleic Acid Binding Proteins
FILE REFERENCE: P2500USM
CURRENT APPLICATION NUMBER: US/09/724,059
CURRENT FILING DATE: 2000-11-28
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APPLICANT: Isalan, Mark
TITLE OF INVENTION: Nucleic Acid Binding Proteins
FILE REFERENCE: P2500USM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/724,059
CURRENT FILING DATE: 2000-11-28
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                                                                                                                                        ORGANISM: Artificial sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
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Local Similarity 66.7%;
nes 6; Conservarion
                                      Local Similarity
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Pred. No.
                                       Mismatches
                                                         Score 39; DB 21;
Pred. No. 16;
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Pred. No. 16;
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RESULT 15
US-09-724-059-163972
; Sequence 163972, Application US/09724059
; GENERAL INFORMATION:
; APPLICANT: Choo, Yen
                                                                                                                       Вb
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US-09-724-059-161692
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; Sequence 159172, App
; GENERAL INFORMATION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 1407122
SOFTWARE: MacAllLister
SEQ ID NO 159172
                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: MacAllLister SEQ ID NO 161692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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Best Local Similarity
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                                                                                                                                                                                         Matches
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APPLICANT: Isalan, Mark
TITLE OF INVENTION: Nucleic Acid Binding Proteins
FILE REFERENCE: P2500USM
CURRENT APPLICATION NUMBER: US/09/724,059
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: GB9710809.6
PRIOR FILING DATE: 1997-05-23
NUMBER OF SEQ ID NOS: 1407122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 161692, Application US/09724059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best
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                                                                                                                                                                                                                                                                                                      TYPE: PRT ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                       OTHER INFORMATION: Polypeptide sequence
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Local Similarity 66.7%;
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13 SETLSCHIK 21
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66.7%;
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Pred. No.
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APPLICANT: Klug, Aaron
APPLICANT: Isalan, Mark
TITLE OF INVENTION: Nucleic Acid Binding Proteins
FILE REFERENCE: P2500USM
CURRENT APPLICATION NUMBER: US/09/724,059
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: GB9710809.6
PRIOR APPLICATION NUMBER: GB9710809.6
PRIOR APPLICATION NUMBER: GB9710809.6
PRIOR APPLICATION NUMBER: GB9710809.6
PRIOR APPLICATION NUMBER: GB9710809.6
PRIOR PRIOR ACAILLISTER
SEQ ID NO 163972
CONSTWARE: MacAllLiSTER
CONSTWARE: Artificial sequence
FEATURE:
COTABRINGORMATION: Polypeptide sequence
FEATURE:
COTABRINGORMATION: Polypeptide sequence
US-09-724-059-163972
COUCHER INFORMATION: Polypeptide sequence
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Minimum DB seq length: 0
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1: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep4:*

2: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep4:*

3: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep4:*

4: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep4:*

5: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*

6: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*

6: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*

9: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*

9: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

10: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

11: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

12: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

13: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

14: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*
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US-10-126-055A-263
US-60-443-566-3006
US-60-455-444-4692
US-10-424-599-20278
US-10-424-599-20278
US-10-425-114-71838
PCT-US01-2928A-140
US-10-425-114-71838
PCT-US01-2928A-264
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                                                                                                    Sequence 140, App
Sequence 140, App
Sequence 22321,
Sequence 58872, A
Sequence 57566, A
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Sequence 23, App
Sequence 3006, App
Sequence 4692, Ap
Sequence 202788,
Sequence 19, Appl
Sequence 158716,
Sequence 158716,
Sequence 47479, A
Sequence 47479, A
Sequence 13964, A
Sequence 71838, A
Sequence 264, App
Sequence 264, App
Sequence 62667, A
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45	44	43	42	41	40	39	38	37	36	35 5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
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US-10-424-599-183093	-10-425-114-	-425-114-	US-10-360-186-54	-654-	US-10-194-486-608		-187	US-10-187-755-608	US-10-174-575A-608	US-10-174-575-608	-892	US-10-223-089-344	US-10-125-923A-608	US-10-417-884-5938	-991-	US-10-416-991-111	US-10-425-114-40164	US-10-425-114-50539	US-10-424-599-192457		US-10-437-963-153309		US-10-282-122A-73834		
Sequence 183093,	Sequence 40007, A	Sequence 39749, A	Sequence 54, Appl	Sequence 344, App	Sequence 608, App	e 608,	-	Sequence 608, App	•	-	•	Sequence 344, App	Sequence 608, App	Sequence 5938, Ap	•	•	Sequence 40164, A	Sequence 50539, A	Sequence 192457,	Sequence 5025, Ap	Sequence 153309,	Sequence 18, Appl	Sequence 73834, A	Sequence 51109, A	Sequence 129618,

ALIGNMENTS

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US-10-126-052A-263
Sequence 263, Application US/10126052A
GENERAL INFORMATION:
APPLICANT: Aziz, Natasha
APPLICANT: Murray, Richard
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer FILE REFERENCE: 018501-001530US
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GENERAL INFORMATION:
APPLICANT: MIXATA, Toshio
TITLE OF INVENTION: A method for Detecting Megsin Protein
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
CURRENT FILING DATE: 2001-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-03-19 PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21 SOFTWARE: Patentin Ver. 2.0
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Matches
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CURRENT APPLICATION NUMBER: US/10/126,052A
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TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                Local Similarity nes 9; Conserv
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100.0%; Pred. No. 0.15;
tive 0; Mismatches
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US-60-455-444-4692
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: SOFTWARE: FASTSEQ for Windows Version 4.0
: SEQ ID NO 3006
: LENGTH: 380
: TYPE: PRT
: ORGANISM: Homo sapiens
US-60-443-566-3006
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US-60-443-566-3006
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; ORGANISM: Homo sapiens
US-10-126-052A-263
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PRIOR FILING DATE: 2001-05-10
PRIOR PPLICATION NUMBER: US 60/339,245
PRIOR FILING DATE: 2001-11-09
PRIOR PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR FILING DATE: 2002-04-12
NUMBER OF SEQ ID NOS: 691
                                                                                                                    Sequence 4692, Application US/60455444
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: REBUMATION ARTHRITIS, METHODS OF DETI-
TITLE OF INVENTION: REGUMATION ARTHRITIS, METHODS OF DETI-
FILE REFERENCE: CL001455
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SEQ ID NO 263
LENCTH: 380
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SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4692 LENGTH: 380
                                                         CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED W
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF
FILE REFERENCE: CL001447
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CURRENT FILING DATE: 2003-01-30
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PRIOR APPLICATION NUMBER: US 60/284,770
PRIOR FILING DATE: 2001-04-18
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res 9; Conserv
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Pred. No.
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CURRENT APPLICATION NUMBER: US/60/465/241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4692
LENGTH: 380
TYPE: PRT
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Best Local S
Matches 9
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SEQ ID NO 202788
LENGTH: 53
TYPE: PRT
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APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
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APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
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Best Local :
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                                                                                                                                                                                                                                                                                                                                          APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy, Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
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                                                                                                                                                                              NAME/KEY: unsure
LOCATION: (1)..(53)
OTHER INFORMATION: unsure at all Xaa locations
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                                                                                                                                             OTHER INFORMATION: Clone ID: PAT_MRT3847_25142C.1.pep
                                                                                                                                                                 FEATURE:
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Pred. No. 0.15;
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Pred. No. 0.15;
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; LENGTH: 56
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_114340C.1.pep
US-10-424-599-158716
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: LOCATION: 51, 94

: OTHER INFORMATION: Xaa is unknown.

US-09-936-883C-19
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RESULT 9
US-10-425-114-47479
Sequence 47479, Application US/10425114
GENERAL INFORMATION:
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CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: JP 1999-75305
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP 1999-306623
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 158716
LENGTH: 56
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APPLICANT: MIYATA, Toshio
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Best Local
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APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwel
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
FILE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (53223)8
CHEBERN ASSOCIATION NIVERED: 16 (1042) 500
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TYPE: PRT
ORGANISM: Rattus norvegicus
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Pred. No.
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US-10-219-051B-13964
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CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 47479
LENGTH: 275
                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Perl script
SEQ ID NO 13964
. LENGTH: 320
TYPE: PRT
                                                                   Sequence 71838, Application US/10425114 GENERAL INFORMATION:
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Best Local
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Best Local
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TITLE OF INVENTION: Nucleotide sequences involved in pain
FILE REFERENCE: LeA 3563 Foreign Countries
CURRENT APPLICATION NUMBER: US/10/219,051B
CURRENT FILING DATE: 2003-05-09
PRIOR APPLICATION NUMBER: US 60/312,147
PRIOR FILING DATE: 2001-08-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(53313)B
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                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                         ORGANISM: Rattus norvegicus
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: SWISS-Prot / CAA41937
DATABASE ENTRY DATE: 2000-05-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/346,382
PRIOR TILING DATE: 2001-11-01
PRIOR APPLICATION NUMBER: US 60/333,347
PRIOR FILING DATE: 2001-11-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: The General Hospital Corporation doing business as Massachusetts Genera
                                   APPLICANT:
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 APPLICANT:
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ORGANISM: Zea mays
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163 SSTLSCHFR 171
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zhou, Yihua
Kovalic, David
Screen, Steven
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Screen, Steven E
Tabaska, Jack E
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Pred. No.
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Mismatches
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APPLICANT: Tabaska, Jack E
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 71838
LENGTH: 638
TYPE: pr. ...
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Sequence 140, Application PC/TUS0129288A
GENERAL INFORMATION:
APPLICANT: Microbia, Inc.
TITLE OF INVENTION: Modulation of Secondary Metabolite Production of Invention: 2inc Binuclear Cluster Proteins
FILE REFERENCE: 14184-019W01
CURRENT APPLICATION NUMBER: PCT/US01/29288A
CURRENT FILING DATE: 2001-09-19
PRIOR APPLICATION NUMBER: US 60/233,564
PRIOR FILING DATE: 2000-09-19
NUMBER OF SEQ ID NOS: 308
NUMBER OF SEQ ID NOS: 308
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APPLICANT:
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                       APPLICANT: Sherman, Amir
TITLE OF INVENTION: Modulation of Secondary Metabolite Production
TITLE OF INVENTION: Zinc Binuclear Cluster Proteins
FILE REFERENCE: 14184-019US1
CURRENT APPLICATION NUMBER: US/10/149,310
CURRENT FILING DATE: 2003-02-19
PRIOR APPLICATION NUMBER: PCT/US01/29288
PRIOR APPLICATION NUMBER: PCT/US01/29288
PRIOR FILING DATE: 2001-09-19
PRIOR APPLICATION NUMBER: US 60/233,564
PRIOR FILING DATE: 2000-09-19
                 NUMBER
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PatentIn
               SEQ ID NOS: 308
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Maxon, Mary
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1.8e+02;
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                                                              US-10-425-114-58872
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SEQ ID NO 58872
LENGTH: 239
TYPE: PRT
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                                                                                                                                                                                                               APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
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TITLE OF INVENTION: Soy Nucleic Acid
TITLE OF INVENTION: Plants and Uses
FILE REFERENCE: 38-21(53223)B
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                                                                             OTHER INFORMATION: Clone ID:
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Zhou Yihua
Cao voo
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              69.2%;
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83.3%;
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Score 36; DB : Pred. No. 89; 2; Mismatches
                                                                           700805614_FLI.pep
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Pred. No.
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Result
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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2: /cgn2_6/ptodata/1/paa/US

3: /cgn2_6/ptodata/1/paa/US

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5: /cgn2_6/ptodata/1/paa/US

6: /cgn2_6/ptodata/1/paa/US

6: /cgn2_6/ptodata/1/paa/US

9: /cgn2_6/ptodata/1/paa/US

9: /cgn2_6/ptodata/1/paa/US

9: /cgn2_6/ptodata/1/paa/US

10: /cgn2_6/ptodata/1/paa/US

11: /cgn2_6/ptodata/1/paa/US

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  5 US-09-140-719-2

US-10-091-442-2

US-08-091-028A-34

5 US-09-140-719-34

9 US-09-508-997A-2

1 US-09-791-537-281
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Sequence 2, Appli
Sequence 2, Appli
Sequence 34, Appl
Sequence 34, Appli
Sequence 2, Appli
Sequence 281, App
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Sequence 13325, A Sequence 10433, A Sequence 13330, A Sequence 10850, A Sequence 112, App	Sequence 34, Appli Sequence 2, Appli Sequence 31156, A Sequence 41856, A Sequence 41856, A Sequence 6, Appli Sequence 6, Appli Sequence 19, Appli Sequence 19, Appli Sequence 2229, Ap Sequence 713, App Sequence 713, App Sequence 11233, A Sequence 3191, Ap Sequence 3191, Ap Sequence 3195, Ap Sequence 3195, Ap Sequence 60256, A Sequence 48701, A Sequence 48701, A Sequence 401, Ap Sequence 401, Ap Sequence 401, Ap Sequence 401, App Sequence 401, Ap Sequence 401, App Sequence 401, App Sequence 401, App Sequence 401, App Sequence 401, App Sequence 2257, Ap Sequence 257, Ap Sequence 2257, Ap Sequence 2257, Ap Sequence 2257, Ap Sequence 2257, Ap Sequence 2257, Ap	nence 3 Ann

ALIGNMENTS

RESULT 1

US-09-140-719-2

Sequence 2, Application US/09140719

GENERAL INFORMATION:
APPLICANT: TSUJINOTO, Masafumi
APPLICANT: IWASA, Fuyuki
APPLICANT: IWASA, Fuyuki
APPLICANT: MIURA, Kenju
APPLICANT: MIURA, Kenju
APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMAGUCHI, NOZOMi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker & Mathis
STREET: P.O. Box 1404
CITY: Alexandria
COUNTRY: United States
ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NAME: US/09/140,719

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US-10-091-442-2
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: JP 4: FILING DATE: 17-JUL-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                            SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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                                                                                                                                                                                             CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
                                                                                                                                                                                                                                                              STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                            ADDRESSEE: Burns, Doane,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     McGowan, Malcolm K.
                                                                                                                                                                                                                                                                                                              OF SEQUENCES:
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Conservative (
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YAMAICHI, KOZO
YAMAGUCHI, NOZOMi
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                                                                                                                                                                                                                                                                                                                                                                                             ISHIDA, Nobuhiro
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NAKAZATO, Hiroshi
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Pred. No. 4.2e+06;
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                                                                                                                                                                                                                                                                              Swecker & Mathis
                                                                                                                 Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 7;
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TELEFAX: (703) 836-
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: MCGOWAN, MAlcolm K.
REGISTRATION NUMBER: 39,300
                                    Local Similarity es 7; Conserv
                                                                                                                                MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: peptid
                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 001560-247 TELECOMMUNICATION INFORMATION:
1 WQSAFTK 7
                                                                                                                                                                                     LENGTH: 7 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                           TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/474,661 FILING DATE: 07-JUN-1995
                                      Conservative
                                                    100.0%;
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                                                    Score 40; DB 24;
Pred. No. 4.2e+06;
                                                                        Length 7;
                                  Indels
                                  0;
                                  Gaps
                                    0
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Sequence 34, Applicat GENERAL INFORMATION: COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4
FILING DATE: 17-JUL-1992 SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA: ATTORNEY/AGENT INFORMATION: PRIOR APPLICATION DATA: TITLE OF INVENTION: NUMBER OF SEQUENCES: APPLICATION NUMBER: JP 5-067339 FILING DATE: 04-MAR-1993 STREET: George Ma CITY: Alexandria STATE: Virginia APPLICATION NUMBER: US/08/091,028A FILING DATE: 14-JUL-1993 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS COUNTRY: United States ZIP: 22313-1404 CLASSIFICATION: Virginia Application US/08091028A George Mason Bldg., Washington & Prince Sts TSURUOKA, Nobuo NAKAZATO, Hiroshi YAMAGUCHI, KURIHARA, Tatsuya YAMAICHI, Kozo MIURA, Kenju ISHIDA, Nobuhiro TSUJIMOTO, Masafumi Burns, Doane, Swecker & Mathis ADDRESS: 14-JUL-1993 Fuyuki MEGAKARYOCYTE DIFFERENTIATION FACTOR: 34 JP 4-212305

REGISTRATION NUMBER:

30,427

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US-09-140-719-34
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Best Local :
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                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/140 710
CLASSIFTO...
                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
FILING DATE: 07-JUN-1995
                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                     FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: P.O. Box 1404
CITY: Alexandria
STATE: Virai-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 100.0%; Score 40; DB Local Similarity 100.0%; Pred. No. 37; es 7; Conservative 0; Mismatches
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                                                              McGowan, Malcolm K.
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NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEGAKARYOCYTE DIFFERENTIATION FACTOR
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                                                                                                                                                                                                                                                                      US 08/474,661
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                                  001560-247
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US-09-791-537-281
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                                                                                                                       ; ORGANISM: Homo sapiens US-09-791-537-281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens US-09-508-997A-2
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                                                                                                                                                                                                                                                                                                         Sequence 281, Application US/09791537
GENERAL INFORMATION:
APPLICANT: Bionomix, Inc.
APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
                                                                                                                                                                                 SOFTWARE: PatentIn version 3.0 SEQ ID NO 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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Best Local :
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Best Local 9
                                                             Matches
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Best Local (
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FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
                                                                                                                                                                                                                             FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                                                                                                                                                                                                                                                   APPLICANT: Danzer, Joseph TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY METITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-09-22
                                                                                                                                                                                                                CURRENT FILING DATE: 2001-02-22 NUMBER OF SEQ ID NOS: 153055
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                                                                                                                                                      LENGTH: 380
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                           Local Similarity hes '7; Conserv
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181 WQSAFTK 187
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nilarity 100.0%;
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                                                          Score 40; DB Pred. No. 37; 0; Mismatches
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US-10-091-442-34
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APPLICANT: MIYATA, Toshio
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21
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TYPE: PRT
ORGANISM: Homo sapiens
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                             PRIOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
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                                                     FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
                                                                                                                                                                                                         APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: United States
                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: P.O. Box 1404
                                                                                                                                                                     APPLICATION NUMBER: US/09/140,719
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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                                       17-JUL-1992
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BER: JP 6-067339
-MAR-1993
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PCT-US01-08631-33136
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LENGTH: 380
TYPE: PRT
                                 SOFTWARE: Custom
SEQ ID NO 33136
LENGTH: 306
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                                                                                                                                                                     APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 21272-049
CURRENT APPLICATION NUMBER: PCT/US01/08631
CURRENT FILING DATE: 2001-03-30
                                                                                  PRIOR APPLICATION NUMBER: 09/649,167
PRIOR FILING DATE: 2000-08-23
NUMBER OF SEQ ID NOS: 60736
                                                                                                                                       PRIOR APPLICATION NUMBER: 09/540,217 PRIOR FILING DATE: 2000-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/110,030 CURRENT FILING DATE: 2002-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE TITLE OF INVENTION: NEPHRITIS
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ORGANISM: Homo sapiens
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 34:
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LENGTH: 380 amino acids
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181 WQSAFTK 187
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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Best Local Similarity
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; OTHER INFORMATION: Xaa - X or * as defined in Table 2
PCT-US01-08631-33136
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                                                                                                                                                                                                                                                                                                                                                              RESULT 12
US-09-508-997A-6
                                                                                                                   US-09-508-997A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens
PCT-US01-08631-41856
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                                                                                                                                                                                                                                                                        Sequence 6, Application us/vssuussii
GENERAL INFORMATION:
APPLICANY: MYKATA, Toshio
TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
FILE REFERENCE: SHIM-004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 85.,
Thes 6; Conservative
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GENERAL INFORMATION:
APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 21272-049
CURRENT APPLICATION NUMBER: PCT/US01/08631
CURRENT FILING DATE: 2001-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 60736
SOFTWARE: CUSTOM
SEQ ID NO 41856
LENGTH: 323
                                                                                                                                                                           SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 6
                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/508,997A CURRENT FILING DATE: 2000-06-27 PRIOR APPLICATION NUMBER: JP 09-275302
                                                                                                                                                                                                         PRIOR FILING DATE: 1997-09-22
NUMBER OF SEQ ID NOS: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/649,167 PRIOR FILING DATE: 2000-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 09/540,217 PRIOR FILING DATE: 2000-03-31
                                                                                                                           LENGTH: 368
TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                        108 WQSVFTK 114
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169 WKSAFTK 175
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Pred. No.
                                                      Score 36; DB 19;
Pred. No. 2.2e+02;
1; Mismatches 0
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Pred. No. 1.9e+02
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                                                                                                                                Sequence 4, Application US/09508997A GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6, Application US/10110030 GENERAL INFORMATION:
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APPLICANT: MIYATA, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 6
LENGTH: 36
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Matches 6; Conserva
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PRIOR FILING DATE: 1999-10-06
NUMBER OF SEC. TO THE PRIOR FILING DATE: 1999-10-06
TITLE OF INVENTION: Megsin Protein
FILE REPERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-09-22
PRIOR FILING DATE: 1997-09-22
NUMBER OF SEO ID NOS: 44
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PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use TITLE OF INVENTION: Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/110,030 CURRENT FILING DATE: 2002-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: SHIM015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE TITLE OF INVENTION: NEPHRITIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Miyata, Toshio
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CURRENT FILING DATE: 2001-12-21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Mus musculus
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TYPE: PRT
ORGANISM: Mus musculus
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nes 6; Conserv
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85.7%;
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85.7%;

    Mismatches

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Pred. No. 2.2e+02;
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Pred. No. 2.2e+02;
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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Run on: OM protein · protein search, using sw model July 11, 2003, 11:55:27; Search time 6.57796 Seconds (without alignments) 280.699 Million cell updates/sec

Title: Perfect score: 6 1 WQSAFTK 7 US-10-091-442-2

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

1229476 seqs, 263775074 residues

Total number of hits satisfying chosen parameters: 1229476

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database Pending_Patents_AA_New:*

1: /cgn2_6/ptcodata/1/paa/PCT_NEW_COMB.pep1:*

2: /cgn2_6/ptcodata/1/paa/PCT_NEW_COMB.pep4:*

3: /cgn2_6/ptcodata/1/paa/US06_NEW_COMB.pep1:*

4: /cgn2_6/ptcodata/1/paa/US06_NEW_COMB.pep4:*

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9: /cgn2_6/ptcodata/1/paa/US08_NEW_COMB.pep4:*

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10: /cgn2_6/ptcodata/1/paa/US09_NEW_COMB.pep4:*

11: /cgn2_6/ptcodata/1/paa/US09_NEW_COMB.pep4:*

12: /cgn2_6/ptcodata/1/paa/US09_NEW_COMB.pep4:*

13: /cgn2_6/ptcodata/1/paa/US09_NEW_COMB.pep4:*

14: /cgn2_6/ptcodata/1/paa/US09_NEW_COMB.pep4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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RESULT 2
US-10-126-052A-263
; Sequence 263, Application US/10126052A
; GENERAL INFORMATION:
; APPLICANT: Aziz, Natasha
; APPLICANT: Murray, Richard
; APPLICANT: Eos Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and
; TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer
; FILE REFERENCE: 018501-001530US
; CURRENT APPLICATION NUMBER: US/10/126,052A

ALIGNMENTS

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; SEQ ID NO 2
; LENGTH: 380
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-936-883C-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
US-09-936-883C-2
                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/09936883C GENERAL INFORMATION:
                                                                             Matches
                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
181 WQSAFTK 187
                                  1 WQSAFTK 7
                                                                             Conservative
                                                                        100.0%; Score 40; DB 100.0%; Pred. No. 6.3; Pative 0; Mismatches
                                                                                                                                                                                                                                                                                                                1999-306623
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                                                                                                                 DB 10;
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                                                                                                             Length 380;
                                                                             Indels
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CURRENT FILING DATE: 2002-04-18
PRIOR APPLICATION NUMBER: US 60/284,770

FILING DATE: 2001-04-18

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US-60-455-444-4692; Sequence 4692, Application US/60455444; GENERAL INFORMATION:
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: SEQ ID NO 3006
: LENGTH: 380
: TYPE: PRT
: ORGANISM: Homo sapiens
US-60-443-566-3006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
US-60-443-566-3006
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PRIOR FILING DATE: 2001-11-09
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR FILING DATE: 2002-04-12
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Best Local
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                                                                            CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
                                                                                                                       APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GREETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001447
                                      SOFTWARE: FastSEQ for Windows Version 4.0
                                                         NUMBER OF SEQ ID NOS: 50986
                                                                                                                                                                                       APPLICANT: CARGILL, Michele APPLICANT: BEGOVICH, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/60/443,566
CURRENT FILING DATE: 2003-01-30
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Q ID NO 4692
LENGTH: 380
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; ORGANISM: Homo sapiens
US-60-455-444-4692
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                                                                                                                                    US-09-936-883C-21
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US-60-465-241-4692
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LENGTH: 380
TYPE: PRT
                                                                                                                                                                                  SOFTWARE: PatentIn Ver.
SEQ ID NO 21
LENGTH: 368
                                                                                  Best
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APPLICANT: MIYATA, Toshio
                                                                 Matches
                                                                                              Query Match
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                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: JP 1999-75305
PRIOR FILING DATE: 1999-03-19
                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: A Method for Detecting Megsin Protein and TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DP1PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF FILE REFERENCE: CL001468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: CARGILL, Michele APPLICANT: BEGOVICH, Ann
                                                                                                                                                                                                                                 PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: JP
                                                                                                                                              LENGTH: 368
TYPE: PRT
ORGANISM: Mus musculus
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Local Similarity 100.0%;
nes 7; Conservative C
169 WKSAFTK 175
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                              1 WQSAFTK 7
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                                                                                Similarity
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85.7%;
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                                                                                Score 36; DB Pred. No. 39;
                                                                                                                                                                                                                                                                   1999-306623
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Pred. No. 6.3;
Mismatches 0;
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                                                               Mismatches
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                                                                                                10; Length 368;
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RESULT 8
US-09-958-359-20
; Sequence 20, Application US/09958359
; GENERAL INFORMATION:
; APPLICANT: SUGEN, INC.
; TITLE OF INVENTION: TYROSINE KINASE SUBSTRATE
; FILE REFERENCE: 038602/0102
; FILE REFERENCE: 03802/0102
                                                                                                                    RESULT 9
US-10-424-599-183524
; Sequence 183524, Application US/10424599
; GENERAL INFORMATION:
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APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A Method for Detecting Megsin Protein and
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
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SEQ ID NO 19
LENGTH: 380
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                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                      Matches
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CURRENT FILING DATE: 2002-02-05
NUMBER OF SEQ ID NOS: 55
                                                                     APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21 SOFTWARE: Patentin Ver. 2.0
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(53223)B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-03-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                             20 ID NO 20
LENGTH: 1717
TYPE: PRT
ORGANISM: Unknown Organism
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ORGANISM: Rattus norvegicus
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                                                                                                                                                                                                                                                                                                                   Local Similarity
nes 6; Conserv
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Local Similarity 85.7%;
nes 6; Conservative
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                                                  Cao Yongwei
                                                                                                                                                                                                                                                                                                                    Conservative
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85.7%;
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Pred. No.
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Pred. No. 3.8e+02;
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Best Local Similarity
"~+~hes 5; Conserv
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US-10-424-599-172361
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Best Local Similarity
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CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 183524
LENGTH: 60
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 12166
                                                                                                                                                                                                                                                        Sequence 12166, Application US/10369493 GENERAL INFORMATION:
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SEQ ID NO 172361
LENGTH: 72
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                                                                    APPLICANT: Chen, Xianfeng
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS
TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
FILE REFERENCE: 38-10(52052)B
CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
CURRENT FILING DATE: 2003-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT FILLOTION NUMBER: US/10/424,599
CURRENT FILLING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
                                                                                                                                                                              APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
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APPLICANT: Kovalic David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Glycine max
FEATURE:
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TYPE: PRT
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LOCATION: (1)..(60)
OTHER INFORMATION: unsure at all xaa locations
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71.4%;
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Pred. No.
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Pred. No.
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RESULT 13
US-10-282-122A-77952
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US-10-369-493-12166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens
US-60-452-680-15528
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Best Local
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Best Local
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APPLICANT:
APPLICANT:
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                                                                                                         PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
                                                                                                                                                                     TITLE OF INVENTION: Identification of Essential Genes
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: ALZHEIMER'S DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: CARGILL, Michele APPLICANT: GRUPE, Andrew
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TYPE: PRT
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nes 5; Conserv
                                                         APPLICATION NUMBER: 60/207,727
FILING DATE: 2000-05-26
APPLICATION NUMBER: 60/230,335
FILING DATE: APPLICATION
                                             FILING DATE:
                           APPLICATION NUMBER: 60/230,347
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5; Conserv
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Trawick, John
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Zyskind, Judith
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Malone, Cheryl
                                                                                                                                                                                                                                                  Yamamoto, Robert Forsyth, R.
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                                                                                                                                                                                                                                                                                                                                                                                                         Liangsu
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                                            2000-09-06
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Pred. No.
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Pred. No. 4.3e+02;
1; Mismatches 1
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2.5e+02;
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US-10-312-273-5
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                                                                                                                                                                      SEQ ID NO 5
LENGTH: 938
TYPE: PRT
                                                                   Best Loc
Matches
                                                                                                   Query Match
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SEQ ID NO 77952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/312,273
CURRENT FILING DATE: 2002-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
FILE REFERENCE: P02
                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 664
SOFTWARE: COMMISSION OF SEQ ID NOS: 664
                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2000-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 0016363.4 PRIOR FILING DATE: 2000-07-03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
                                                                                                                                                                                                                        SOFTWARE:
                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2000-08-07
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                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 0017983.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-07-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 0017047.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 78614
                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2000-11-10
                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER:
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TYPE: PRT
                                                                                   Local
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642 WQSAYT 647
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                                 1 WQSAFT 6
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                                                                   Conservative
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                                                                                 Score 32; DB 12;
Pred. No. 5.6e+02
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                                                                                 6e+02;
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RESULT 15 US-10-289-762-500

Sequence 500, Application US/10289762 GENERAL INFORMATION:

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TITLE OF INVENTION: Characytin pneumoniae genomic sequence and polypeptides, fragments TITLE OF INVENTION: Characterist of infection

FILE MERENCE: 9710-003-99

FILE MERENCE: 9710-003-99

FIRE PRESENCE: 9710-003-99

SEQ ID NO 500

SEQ ID NO 500

ORGANISH: Chianylia pneumoniae

US-10-288-765-20

ORGANISH: Chianylia pneumoniae

US-10-288-765-20

ONGEN MARCH

BOST LORGET 6

Db 644 WGANT 669

Db 644 WGANT 669

Db 644 WGANT 669

Db 644 WGANT 669

Db 110 111 169

Db 141 WGANT 669

Db 141 FIRE PRESENCE 1, 2003, 12:35:05

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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.5
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204.833 Million cell updates/sec
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1: /cgn2_6/ptodata/1/paa/PCTUS_COMB.pep:*

2: /cgn2_6/ptodata/1/paa/US06_COMB.pep:*

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/cgn2_6/ptodata/1/paa/US081_COMB.pep:*
/cgn2_6/ptodata/1/paa/US082_COMB.pep:*
/cgn2_6/ptodata/1/paa/US083_COMB.pep:*
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ALIGNMENTS

US-09-140-719-3 RESULT 1 Sequence 3, Application US/09140719 GENERAL INFORMATION CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA: APPLICANT: KURIHARA, Tatsuya

APPLICANT: YAMAICHI, KOZO

APPLICANT: YAMAGUCHI, KOZOMİ

TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34 APPLICANT: CORRESPONDENCE ADDRESS: APPLICANT:
APPLICANT: APPLICANT: APPLICANT: STREET: APPLICATION NUMBER: ADDRESSEE: E: Burns, Doane, Swecker & Mathis P.O. Box 1404 TSUROUOKA, Nobuo NAKAZATO, Hiroshi MIURA, Kenju TSUJIMOTO, Masafumi ISHIDA, Nobuhiro IWASA, Fuyuka us/09/140,719 Version #1.30

Result No.

Query Match L

Length DB

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Description

SUMMARIES

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100.0 100.0 100.0 100.0

5 US-09-140-719-3 4 US-10-091-442-3 7 US-08-091-028-3839 US-08-091-028-34 5 US-09-140-719-34 9 US-09-508-997A-2

Sequence 34, Appl Sequence 34, Appl Sequence 2, Appli

Sequence 3, Appli Sequence 3, Appli Sequence 3839, Ap

PRIOR APPLICATION DATA:

US 08/474,661

CLASSIFICATION:

08-AUG-1998

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RESULT 2
US-10-091-442-3
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REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEPAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
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Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                               COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <UNknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane,
                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 VERVDFTNHLEDTRRNINK 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19;
                                                                                                                                                                                                                              CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERVDFTNHLEDTRRNINK 19
                                                                                                                                                                                                                                                                                                           STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                                                          KURIHARA, Tatsuya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MIURA, Kenju
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISHIDA, Nobuhiro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                                                                                                                                                                                        AMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F'uyuk 1
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                                                                                                                                                                                                                                                                                                                             Swecker & Mathis
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RESULT 4
US-08-091-028A-34
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, NAME/KEY: VARIANT
; LOCATION: (1)...(41)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-60-196-718-3839
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US-60-196-718-3839
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                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/60/196,718
CURRENT FILING DATE: 2000-04-13
NUMBER OF SEQ ID NOS: 7494
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3839
                                                                                                                                                         Query Match
Best Local :
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APPLICANT: Bonazzi
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TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE: CLOO
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                                                                                                                                                                                                                                                                                         ORGANISM: HUMAN
                                                                                                                                                                                                                                                                                                              LENGTH: 41
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: McGowen, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-2.
TELEPHONE: (703) 836-6620
TELEPHONE: (703) 836-6620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: peptid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                     15 VERVDFTNHLEDTRRNINK 33
                                                                                                                                         l Similarity
19; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bonazzi, Vivien
                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/60196718
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISOLATED HUMAN SECRETED PROTEINS, AND NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                USES THEREOF
                                                                                                                                       100.0%; Score 100; DB 27; 100.0%; Pred. No. 5.7e-09; Live 0; Mismatches 0;
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Pred. No. 2.2e-09;
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Sequence 34, Application US/08091028A GENERAL INFORMATION:
APPLICANT: TSUJIMOTO, Masafumi

APPLICANT: APPLICANT:

TSURUOKA, Nobuo

IWASA, Fuyuki

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Query Match
Best Local Similarity
watches 19; Conserve
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US-09-140-719-34
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LENGTH: 380 amino acids
TYPE: amino acid
TOPOLOGY: Linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (703) 836-66
INFORMATION FOR SEQ ID NO:
                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                     APPLICANT:
                                  CORRESPONDENCE ADDRESS
                                                  TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: JP 5
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: JP 4:
FILING DATE: 17-JUL-1992
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APPLICATION NUMBER: US/08/091,028A
FILING DATE: 14-JUL-1993
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MEDIUM TYPE: Floppy disk
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                                                                                                     APPLICANT:
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                                                                                     APPLICANT:
                                                                                                                      APPLICANT:
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CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 30,427 REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Burns, Doane, Swecker & Mathis
STREET: George Mason Bldg., Washington & Prince Sts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE:
                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                        126 VERVDETNHLEDTRRNINK 144
                                                                                                                                                                                                                                                                                                                                                           1 VERVDETNHLEDTRRNINK 19
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                                                                                                                                                                                                                                                    Application US/09140719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (703) A7
E: Burns, Doane, Swecker & Mathis P.O. Box 1404
                                                                                   YAMAGUCHI, Nozomi
                                                                                                KURIHARA, Tatsuya
YAMAICHI, KOZO
                                                                                                                                    MIURA, Kenju
ISHIDA, Nobuhiro
                                                                                                                                                                  TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
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                                                                                                                                                                                                                     TSUJIMOTO, Masafumi
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                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 100; DB 4; 100.0%; Pred. No. 9.1e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 380;
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US-09-508-997A-2
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                                                                                                                                                       SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 2
LENGTH: 380
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Applicat GENERAL INFORMATION:
                                                     Matches
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                                                                   Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                   APPLICANT: MIYATA, Toshio TITLE OF INVENTION: Megsin Protein FILE REFERENCE: SHIM-004
                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: JP 09-275302 PRIOR FILING DATE: 1997-09-22
                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 44
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                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: McGowan, Malcolm K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
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MEDIUM TYPE: Floppy disk
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 39,300 REFERENCE/DOCKET NUMBER: 00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0.
                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: Virginia
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                                                     19;
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1 VERVDFTNHLEDTRRNINK 19
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                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 100; DB 15; 100.0%; Pred. No. 9.1e-08; tive 0; Mismatches 0;
                                                   100.0%; Score 100; DB 19; 100.0%; Pred. No. 9.1e-08; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP 6-067339
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                                                                                    Length 380;
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RESULT 9
US-10-091-442-34
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                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT; ORGANISM: Homo sapiens US-09-936-883A-2
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US-09-936-883A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
                                                                                                                             Sequence 34, Application US/10091442 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09936883A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 281, Application US/09791537 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                           Best
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DPIPCT CURRENT APPLICATION NUMBER: US/09/936,883A CURRENT FILING DATE: 2001-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
EILE REFERENCE: 261/210

FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/791,537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bionomix, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: MIYATA, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 38
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / Match 100.0%; Score 100; DB 21; Local Similarity 100.0%; Pred. No. 9.1e-08; es 19; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                        APPLICANT: TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                    126 VERVDFTNHLEDTRRNINK 144
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                                                                                                                                                                                                                                                                                                                                   Conservative
                             IWASA, Fuyuki
TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
MIURA, Kenju
ISHIDA, Nobuhiro
                                                                                                                                                                                                                                                                                                                                                      100.0%;
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                                                                                                                                                                                                                                                                                                                                 Score 100; DB 23;
Pred. No. 9.1e-08;
; Mismatches 0;
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US-10-110-030-2
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                                                                                                                                                                                                                       Sequence 2, Application US/10110030 GENERAL INFORMATION:
APPLICANT: Miyata, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 19; Conserv
                       SEQ ID NO 2
                                    CURRENT APPLICATION NUMBER: US/10/110,030 CURRENT FILING DATE: 2002-04-03 PRIOR APPLICATION NUMBER: 11/285736 PRIOR FILING DATE: 1999-10-06 NUMBER OF SEQ ID NOS: 15 SOFTMARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                 FILE REFERENCE: SHIM015
                                                                                                                                                                                    TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE TITLE OF INVENTION: NEPHRITIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 34:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: McGowan, Malcolm K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: <Unknown> PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YAMAGUCHI, NOZOMÌ
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
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FILING DATE: 14-UUL-193
APPLICATION NUMBER: UP 4-212305
FILING DATE: 17-UUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: JP 6 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (703) 836-66
TELEFAX: (703) 836-2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 22313-1404
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YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EE: Burns, Doane,
P.O. Box 1404
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; ORGANISM: HO
US-10-110-030-2
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US-08-091-028-3
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                                                          Query Match
Best Local S
Matches 16
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                                                                                                                                                                                                           TELEFAX: (703) 836-6620 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/091,028
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                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: Crane-Fener: "
                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
ETITLE APPLICATION NUMBER: JP 5-067339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
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                                                                                                                                     MOLECULE TYPE:
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                                                                                                                                                                          TYPE: amino acids
                                                                                                                                                                                                                                                                                              NAME: Crane-Feury, Sharon E
REGISTRATION NUMBER: 36,113
                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 14 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: United States ZIP: 22313-1404
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                                                                                                                                                STRANDEDNESS: single TOPOLOGY: linear
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                                                                         Similarity
VERVOFTNHLEDTRRNINK 144
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George Mason Bldg., Washington & Prince Sts
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
                                                           Conservative
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DN: 435
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                                                                         82.0%;
84.2%;
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                                                           0
                                                                         Score 82;
Pred. No.
                                                           Mismatches
                                                                         DB 4;
2.3e-06;
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/091,028A
FILING DATE: 14-JUL-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: JP 5-067339
APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
NAME: REA, TERESA STANEK
NAME: REA, TERESA STANEK
                                                                                                                                                              Matches
                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:

OLECULE

TOPOLOGY:

19 amino acids

TRANDEDNESS:

19 amino acid

STRANDEDNESS:

19 amino acid

STRANDEDNESS:

10 amino acid

STRANDEDNESS:

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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 30,427
REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
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MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
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TSURUOKA, Nobuo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MIURA, Kenju
                                                                                                                                                              Conservative
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KURIHARA, Tatsuya
YAMAICHI, Kozo
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84.2%; Pred. No.
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RESULT 13 US-09-508-997A-6

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Sequence 6, Application US/09508997A
GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein

FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27

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Sequence 6, Application US/10110030

GENERAL INFORMATION:

APPLICANT: Miyata, Toshio

TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE

TITLE OF INVENTION: NEPHRITIS

FILE REFERENCE: SHIM015

CURRENT APPLICATION NUMBER: US/10/110,030

CURRENT APPLICATION NUMBER: 11/285736

PRIOR APPLICATION NUMBER: 11/285736

PRIOR APPLICATION NUMBER: 11/285736

PRIOR APPLICATION NUMBER: 10-0-6

1 NUMBER OF SEQ ID NOS: 15

SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: JP.
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 21
LENGTH: 368
TYPE: PRT
ORGANISM: Mus musculus
US-09-936-883A-21
                                                                             ; SEQ ID NO 6
; LENGTH: 368
; TYPE: PRT
; ORCANISM: Mus musculus
US-10-110-030-6
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US-10-110-030-6
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; ORGANISM: Mus musculus
US-09-508-997A-6
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APPLICANT: MIYATA, Toshio
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Best Local Similarity 73.7
Matches 14; Conservative
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Best Local Similarity 73.7%;
Matches 14; Conservative
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SEQ ID NO 6
LENGTH: 368
     Best Local
                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DPCT CURRENT APPLICATION NUMBER: US/09/936,883A CURRENT FILING DATE: 2001-12-21 PRIOR APPLICATION NUMBER: JP 1999-75305 PRIOR APPLICATION NUMBER: JP 1999-75305 PRIOR FILING DATE: 1999-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: JP 09-275302 PRIOR FILING DATE: 1997-09-22
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114 VERVDFTNDVQDTRFKINK 132
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114 VERVDFTNDVQDTRFKINK 132
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   Similarity 73.7
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73.7%;
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: Pred. No. 0.00
2; Mismatches
Score 71; DB 25; Length 368; Pred. No. 0.0065; 2; Mismatches 3; Indels
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Pred. No. 0.0065;
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Search completed: July 11, 2003, 12:27:30 Job time: 61.8046 secs

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seq length: 2000000000
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1: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep1:*

2: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep4:*

3: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep1:*

4: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep1:*

5: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*

6: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*

7: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*

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10: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep1:*

11: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*

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14 US-60-443-566-3006
14 US-60-455-444-4692
14 US-60-455-241-4692
10 US-09-936-883C-21
10 US-09-936-883C-21
11 US-60-43-566-4373
14 US-60-455-241-7455
12 PCT-US02-07215B-12
13 PCT-US03-17409-175
14 US-60-448-285-5
16 US-09-724-676-57391
17 US-09-724-676-57391
18 US-10-366-683-26823
28 US-10-366-683-26823
28 US-10-382-1228-47218
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US-10-126-052A-263
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280.699 Million cell updates/sec
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                                                                              Sequence 2, Appli
Sequence 263, App
Sequence 4692, Ap
Sequence 4692, Ap
Sequence 21, Appl
Sequence 21, Appl
Sequence 7455, Ap
Sequence 7455, Ap
Sequence 175, Appl
Sequence 175, Appl
Sequence 57, Appl
Sequence 57, Appl
Sequence 57, Appl
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375	375	375	375	375	375	375	258	258	258	215	215	215	1043	507	506	504	504	504	504	504	504	503	503	689	481
14	14	12	12	12	N	N	14	14	14	14	14	14	10	10	12	14	14	14	14	12	N	12	N	12	12
US-60-449-629-149	US-60-438-735-166	US-10-376-564-4	US-10-376-564-3	US-10-126-052A-36	PCT-US03-17409-189	PCT-US02-19592-93	.US-60-465-241-5239	US-60-455-444-5239	US-60-443-566-4033	US-60-465-241-5240	US-60-455-444-5240	US-60-443-566-4034	US-09-949-016-11650	US-09-949-016-10802	US-10-373-877-18	US-60-466-412-15050	US-60-453-050-15050	US-60-453-135-15050	US-60-452-680-24158	US-10-219-051B-14338	PCT-US02-20350-6	US-10-219-051B-14336	PCT-US02-20350-4	US-10-425-114-45472	US-10-425-114-68385
Sequence 149, App	Sequence 166, App	4	Sequence 3, Appli	Sequence 36, Appl	•	Sequence 93, Appl	39,	Sequence 5239, Ap	Sequence 4033, Ap	Sequence 5240, Ap	`	Sequence 4034, Ap	Sequence 11650, A	1080	Sequence 18, Appl	1505	Sequence 15050, A	Sequence 15050, A	Sequence 24158, A	Sequence 14338, A	Sequence 6, Appli	Sequence 14336, A	Sequence 4, Appli	Sequence 45472, A	Sequence 68385, A

ALIGNMENTS

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APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: UP 1999-75305
PRIOR APPLICATION NUMBER: UP 1999-306623
PRIOR APPLICATION NUMBER: JP 1999-306623
PRIOR PILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH 200
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-936-883C-2
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US-10-126-052A-263
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US-09-936-883C-2
                                                                                                                                                                          Sequence 263, Application US/10126052A GENERAL INFORMATION:
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Best Local Similarity
Matches 19; Conserv
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APPLICANT: Aziz, Natasha
APPLICANT: Murray, Richard
APPLICANT: Eos Biotechnology, Inc.
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and
TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer
FILE REFERENCE: 018501-001530US
CURRENT APPLICATION NUMBER: US/10/126,052A
                                                                                                                                                                                                                                                                                                                                126 VERVDFTNHLEDTRRNINK 144
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CURRENT FILING DATE: 2002-04-18
PRIOR APPLICATION NUMBER: US 60/284,770
PRIOR FILING DATE: 2001-04-18

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo sapiens
US-60-443-566-3006
CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4692
LENGTH: 380
                                                                                                                                                                                 Sequence 4692, Application US/60455444
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
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Best Local
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3006
LENGTH: 380
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SEQ ID NO 263
                                                                                                                          TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF FILE REFERENCE: CL001455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETFILE REFERENCE: CL001447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: US 60/339,245
PRIOR FILING DATE: 2001-11-09
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/60/443,566 CURRENT FILING DATE: 2003-01-30
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19; Conserv
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19; Conserv
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100.0%; Pred. No. 7.2e-08;
tive 0; Mismatches 0;
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100.0%; Pred. No. 7.2e-08;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 380;
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RESULT 7

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PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 368
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; ORGANISM: Homo sapiens
US-60-455-444-4692
                                                                                                                                             US-09-936-883C-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens US-60-465-241-4692
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CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4692
LENGTH: 380
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21, Application US/09936883C GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4692, Application US/60465241
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
                                                                       Matches
                                                                                        Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/936,883C CURRENT FILING DATE: 2001-12-21 PRIOR APPLICATION NUMBER: JP 1999-75305 PRIOR FILING DATE: 1999-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETIFILE REFERENCE: CL001468
                                                                                                                                                                TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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Local Similarity 100.0%;
ses 19; Conservative 0
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114 VERVDFTNDVQDTRFKINK 132
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                  1 VERVDFTNHLEDTRRNINK 19
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                                                                       Conservative
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                                                                                        Score 71; DB 10;
Pred. No. 0.0034;
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                                                                     Mismatches
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                                                                                                       Length 368;
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US-60-455-444-7455
; Sequence 7455, Application US/60455444
; GENERAL INFORMATION:
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; LOCATION: 51, 94
; OTHER INFORMATION: Xaa is unknown.
US-09-936-883C-19
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US-60-443-566-4373
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4373
LENGTH: 328
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SEQ ID NO 19
LENGTH: 380
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APPLICANT: MIYATA, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19, Application US/09936883C
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: A Method for Detecting Megsin Protein and TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DP1PCT CURRENT APPLICATION NUMBER: US/09/936,883C CURRENT FILING DATE: 2001-12-21
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NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
                 APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS
TITLE OF INVENTION: RHEUMATOID ARTHRITIS,
FILE REFERENCE: CLOO1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2001-12-21 PRIOR APPLICATION NUMBER: JP 1 PRIOR FILING DATE: 1999-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2003-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/60/443,566
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: JP
CURRENT APPLICATION NUMBER: US/60/455,444
                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
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3; Mismatches
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US-60-465-241-7455
                                                                                    ; ORGANISM: Homo sapiens PCT-US02-07215B-12
                                                                                                                                                                                                                                                                                                                                    PCT-US02-07215B-12
                                                                                                                                        CURRENT APPLICATION NUMBER: PCT/US02/07215B
CURRENT FILING DATE: 2002-03-08
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn version 3.1
SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows Version SEQ ID NO 7455
LENGTH: 328
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7455
                                          Query Match
Best Local 9
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APPLICANT: DuBose, Robert F
APPLICANT: Wiley, Steven R
TITLE OF INVENTION: HUMAN SERDIN POLYPEPTIDES
FILE REFERENCE: 3223-WO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/60/465,241 CURRENT FILING DATE: 2003-04-23
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                                                                                                                LENGTH: 39
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1 VERVDFTNHLEDTRRNIN 18
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                           Similarity 55.6
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Similarity 55.6%;
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131 VESVDFANAPEESRKKIN 148

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-448-285-5
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US-60-448-285-5
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US-09-724-676-57391
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: 1451328CD1
PCT-US03-17409-175
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PRIOR FILING DATE: 2002-06-04
NUMBER OF SEQ ID NOS: 296
SOFTWARE: PERL Program
SEQ ID NO 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5, Application US/60448285 GENERAL INFORMATION:
                                                                                                                                        Sequence 57391, Application US/09724676 GENERAL INFORMATION:
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Best Local
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SEQ ID NO 5
SEQ ID NO 57391
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                             APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
                  SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/60/448,285
CURRENT FILING DATE: 2003-02-19
NUMBER OF SEQ ID NOS: 9
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TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE INHIBITION OF
TITLE OF INVENTION: CATHERSINS
FILE REFERENCE: ARCD:390USP1
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APPLICANT: RICKERT, Paula K.
APPLICANT: KRASNOW, Randi
TITLE OF INVENTION: DIAGNOSTIC MARKERS FOR LUNG CANCER
FILE REFERENCE: PA-0051 PCT
CURRENT APPLICATION NUMBER: PCT/US03/17409
CURRENT FILING DATE: 2003-06-02
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TYPE: PRT
ORGANISM: Homo sapiens
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Search completed: July 11, Job time: 19.9545 secs
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US-09-724-676A-57391
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                                                                                                                                                                                                  US-09-724-676A-57391
                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676A CURRENT FILING DATE: 2000-11-28 NUMBER OF SEQ ID NOS: 97222 SOFTWARE: PatentIn version 3.2 SEQ ID NO 57391
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Best Local Similarity
Matches 10; Conserv
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LOCATION: (8)...(8)
OTHER INFORMATION: Xaa can be any naturally occurring amino acid
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TYPE: PRT
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Pred. No. 9.
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Listing first 45 summaries
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Maximum DB seq length: 2000000000
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/cgn2_6/ptodata/1/paa/US091_COMB.pep:*
/cgn2_6/ptodata/1/paa/US091_COMB.pep:*
/cgn2_6/ptodata/1/paa/US091_COMB.pep:*
/cgn2_6/ptodata/1/paa/US093_COMB.pep:*
/cgn2_6/ptodata/1/paa/US093_COMB.pep:*
/cgn2_6/ptodata/1/paa/US093_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cgn2_6/ptodata/1/paa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO6_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /cgn2_6/ptodata/1/paa/US07_COMB.pep:*
/cgn2_6/ptodata/1/paa/US080_COMB.pep:*
/cgn2_6/ptodata/1/paa/US081_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /cgn2_6/ptodata/1/paa/US082_COMB.pep:
/cgn2_6/ptodata/1/paa/US083_COMB.pep:
/cgn2_6/ptodata/1/paa/US098_COMB.pep:*
/cgn2_6/ptodata/1/paa/US099_COMB.pep:*
/cgn2_6/ptodata/1/paa/US109_COMB.pep:*
/cgn2_6/ptodata/1/paa/US101_COMB.pep:*
/cgn2_6/ptodata/1/paa/US102_COMB.pep:*
/cgn2_6/ptodata/1/paa/US102_COMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

6 83	5 83	4 83	3 83	2 83	1 83	No. Score Match	Result	
100.0					100.0	Match	Query	•
380 1	380 1	380 4	118 2	17 2	17 1	e Match Length DB ID		
9 US-09-508-997A-2	5 US-09-140-719-34	US-08-091-028A-34	7 US-60-188-162-4539	4 US-10-091-442-4	7 15 US-09-140-719-4	DB ID		
Sequence 2, Appli	Sequence 34, Appl	Sequence 34, Appl	Sequence 4539, Ap	Sequence 4, Appli	Sequence 4, Appli	Description		

ALIGNMENTS

FILING DATE:

08-AUG-1998

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Q
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US-10-091-442-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/10091442 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 14-JUL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 100.0%;
Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: JP 4-FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 07-JU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER:
                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: - CUNKNOWN>
PRIOR APPLICATION DATA:
                                                                                                            ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version
                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 34 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                 ADDRESSEE: Burns, Doane, Swecker & Mathis STREET: P.O. Box 1404
                                                                                                                                                                                                                   COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 McGowan, Malcolm K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                               KURIHARA, Tatsuya
YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                              ISHIDA, Nobuhiro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IWASA,
                                                                                                                                                                                                                                                                                                                                                                                                                               TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JP 4-212305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP 6-067339
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Pred. No. 3.6e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
                                                                                                                   #1.30
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                                                                                                                                                                RESULT 4
                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: HUMAN US-60-188-162-4539
                                                                                                                                                                                                                                                                                                                                                                         CURRENT FILING DATE: 1
NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 4539
LENGTH: 118
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4539, Applica
GENERAL INFORMATION:
APPLICANT: Beasley,
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-60-188-162-4539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-091-442-4
                                                                                                              Sequence 34, Application US/08091028A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/60/188,162
CURRENT FILING DATE: 2000-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (703) 836-202:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENCTH: 17 amino acids
TYPE: amino acid
                                                                                APPLICANT:
APPLICANT:
 APPLICANT:
                               APPLICANT:
                                                                 APPLICANT:
                  APPLICANT:
                                                  APPLICANT:
                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: peptid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                            1 SYIEVTEEGTEATAATG 17
                                                                                                                                                                                                                                                                             . Similarity
17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/474,661 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Beasley, Ellen
                                                TSURUOKA, Nobuo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/60188162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
KURIHARA, Tatsuya
                               MIURA, Kenju
                                                                              IWASA, Fuyuki
                                                                                               TSUJIMOTO, Masafumi
                  ISHIDA, Nobuhiro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CL000518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ISOLATED HUMAN SECRETED PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                           100.0%;
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Pred. No. 3.6e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                           Score 83;
Pred. No.
                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                           5e-06;
                                                                                                                                                                                                                                                                                                           DB 27;
                                                                                                                                                                                                                                                                                                          Length 118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                             Indels
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SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-091-028A-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity Juniches 17; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
US-09-140-719-34
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APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
REGISTRATION NUMBER: 30,427
REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (703) 836-66
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
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PG-DOS/MS-DOS

PG-DOS/MS-DOS

PC-DOS/MS-DOS

PC-DOS/MS-DOS

PC-DOS/MS-DOS

PC-DOS/MS-DOS

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PC-DOS/MS
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE
                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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COMPUTER READABLE FORM:
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STATE: Virginia
                                                                                                CITY: Alexandria
STATE: Virginia
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                                  COUNTRY: United States 
ZIP: 22313-1404
                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
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                                                                                                                                                                                              ADDRESSEE:
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                                                                                             Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09140719
                                                                                                                                                           E: Burns, Doane, Swecker & Mathis P.O. Box 1404
                                                                                                                                                                                                                                 YAMAGUCHI, NOZOMA
YENTION: MEGAKARYOCYTE
PONIENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Burns, Doane, Swecker & Mathis
George Mason Bldg., Washington & Prince Sts.
                                                                                                                                                                                                                                                                                                                                                          KURIHARA, Tatsu
YAMAICHI, KOZO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSUROUOKA, Nobuo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIURA, Kenju
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAKAZATO, Hiroshi
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                                                                                                                              LENGTH: 380
TYPE: PRT
ORGANISM: Homo sapiens
US-09-508-997A-2
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                                                                                                                                                                                              SEQ ID NO 2
                                                                 Matches
                                                                                Query Match
Best Local s
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Best Local
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TITLE OF INVENTION: MegSin Protein
FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-09-22
NUMBER OF SEQ ID NOS: 44
                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 17-JUL-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 14-JUL-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 00 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 04-MAR-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 01 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 325 SYIEVTEEGTEATAATG 341
325 SYIEVTEEGTEATAATG 341
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17; Conserv
                  1 SYIEVTEEGTEATAATG 17
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nilarity 100.0%;
Conservative (
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                                                               Score 83; DB 19;
Pred. No. 2.4e-05;
; Mismatches 0;
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Pred. No. 2.4e-05;
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RESULT 7

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NUMBER OF SEQUENCES:

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RESULT 9
US-10-091-442-34
; Sequence 34, Applicati
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens US-09-936-883A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens US-09-791-537-281
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SOFTWARE: Patentin version 3.0
SEQ ID NO 281
                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 2
LENGTH: 380
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GENERAL INFORMATION:
APPLICANT: MIYATA,
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 21 SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: CURRENT FILING DATE: 2001-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use TITLE OF INVENTION: Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: F2-101DP1PCT
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                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
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    TITLE
                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                        325 SYIEVTEEGTEATAATG 341
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    QF
OF
                                                                                                                                                                         Application US/10091442
                                                                                                                                                                                                                                                                                                                      Conservative
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INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                          TSUJIMOTO, Masafumi
                               KURIHARA, Tatsu
YAMAICHI, Kozo
                                          ISHIDA, Nobuhiro
KURIHARA, Tatsuya
                                                                              MIURA, Kenju
                                                                                           TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
                                                                                                                        IWASA, Fuyukı
                AMAGUCHI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Toshio
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                Nozomi
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                                                                                                                                                                                                                                                                                                                                   Score 83;
Pred. No.
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Pred. No.
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; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-091-442-34
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US-10-110-030-2
; ORGANISM: Homo sapiens
US-10-110-030-2
                                                                                                                                                                                                                       Sequence 2, Application US/10110030
GENERAL INFORMATION:
APPLICANT: MIYALA, TOSHIO
TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE
TITLE OF INVENTION: NEPHRITIS
                                                                       SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                       NUMBER OF SEQ
SOFTWARE: Fast
                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/110,030 CURRENT FILING DATE: 2002-04-03
                                                                                                                              PRIOR APPLICATION NUMBER: 11/285736 PRIOR FILING DATE: 1999-10-06
                                                                                                                                                                                    FILE REFERENCE: SHIMO15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
                                                    LENGTH: 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                               325 SYIEVTEEGTEATAATG 341
                                                                                                                                                                                                                                                                                                                                                                                                                1 SYIEVTEEGTEATAATG 17
                                                                                           FastSEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: Virginia COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Burns, Doar STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1198
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-7UN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-7UL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (703) 836-2021
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/10/091,442
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; ilarity 100.0%; Conservative 0;
                                                                                                              ID NOS:
                                                                                           for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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Pred. No.
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; TYPE: PRT
; ORGANISM: Bos taurus
US-09-791-537-45859
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US-10-023-634-84
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APPLICANT:
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APPLICANT:
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APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
APPLICANT: MILLET, ISAbelle
APPLICANT: Gerlach, Valerie
TITLE OF INVENTION: Proteins, Polynucleotides Encoding
TITLE OF INVENTION: Using the Same
FILE REFERENCE: 21402-221
CURRENT APPLICATION NUMBER: US/10/023,634
CURRENT FILING DATE: 2002-06-28
PRIOR APPLICATION NUMBER: 60/256,025
PRIOR APPLICATION NUMBER: 60/256,025
PRIOR APPLICATION NUMBER: 60/265,163
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
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17; Conserv
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14; Conservative
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Guo, Xiaojia
Guo, Yiaojia
Tarnev, Velizar T
                                                                                                                                                  Gangolli, Esha A
Malyankar, Uriel M
Gunther, Erik
Smithson, Glennda
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                                                                                                                                                                                                              Burgess, Catherine
Edinger, Shlomit R
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Spytek, Kimberly A
                                                                                                                                                                                                                                                            Boldog,
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                                                                                                                                                                                                                                                                        Casman, Stacie J
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Pred. No. 2.4e-05;
Mismatches 0;
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US-08-091-028-4
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 2001-03-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE:
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                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/091,028
FILING DATE: 14-JUL-1993
CLASSIFICATION: 435
                                          APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                  STREET: George Mason Blc
CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
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          NAME: Crane-Feury, Sharon E REGISTRATION NUMBER: 36,113
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George Mason Bldg., Washington &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TSURUOKA, Nobuo
NAKAZATO, Hiroshi
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ISHIDA, Nobuhiro
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YAMAICHI, Kozo
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OS: 132
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82.4%;
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001560-204
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Pred. No. 0.0013;
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                                                                                                                                                                                                                                         Version
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TELEFAX: (703) 836-6620 INFORMATION FOR SEQ ID NO: '

4

TELEPHONE:

(703) 836-6620

SEQUENCE CHARACTERISTICS:

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LENGTH: 17 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-091-028-4
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US-08-091-028A-4
       TELEFAX: (703) 885-6620
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
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Best Local Similarity 87.5
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/091,028A
FILING DATE: 14-JUL-1993
                                                                                                                                                REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                  APPLICATION NUMBER: JP 5-
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy
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TITLE OF I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                     REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: United ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Burns, Doane, Swecker & Mathis
George Mason Bldg., Washington & Prince Sts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TSURUOKA, Nobuo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YAMAGUCHI, Nozomi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KURIHARA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MIURA, Kenju
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IWASA, Fuyuki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SHIDA, Nobuhiro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEGAKARYOCYTE DIFFERENTIATION FACTOR: 34
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87.5%;
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CURRENT APPLICATION NUMBER: US/60/196,718
CURRENT FILING DATE: 2000-04-13
NUMBER OF SEQ ID NOS: 7494
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4162
SEQ ID NO 4162
LENGTH: 88
TYPE: PRT
ORGANISM: HUMAN
US-60-196-718-4162
Search completed: July 11, 2003, 12:27:31 Job time: 54.5094 secs
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                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                        Sequence 4162, Application US/
GENERAL INFORMATION:
APPLICANT: Bonazzi, Vivien
TITLE OF INVENTION: USCLATED
TITLE OF INVENTION: UUCLEIC
TITLE OF INVENTION: USES THE
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Best Local S
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13; Conserv
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|||||||||||| 1 | 1
2 YIEVTEEGTEAXAAXG 17
                                                                                                                                                                                                                                                                  FastSEQ for Windows Version 4.0
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87.5%;
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76.5%;
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Pred. No. 0.00094;
3; Mismatches 1
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Minimum DB seq
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                 Pending_Patents_AA_New:*

1: /cgn2_6/ptodata/1/paa/P

2: /cgn2_6/ptodata/1/paa/P

3: /cgn2_6/ptodata/1/paa/U

4: /cgn2_6/ptodata/1/paa/U

5: /cgn2_6/ptodata/1/paa/U

6: /cgn2_6/ptodata/1/paa/U

7: /cgn2_6/ptodata/1/paa/U

9: /cgn2_6/ptodata/1/paa/U

10: /cgn2_6/ptodata/1/paa/U

11: /cgn2_6/ptodata/1/paa/U

12: /cgn2_6/ptodata/1/paa/U

13: /cgn2_6/ptodata/1/paa/U

14: /cgn2_6/ptodata/1/paa/U
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length: 2000000000
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83
1 SYIEVTEEGTEATA
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//cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep:*
//cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*
//cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*
//cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*
//cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*
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/cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep4:*
/cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep4:*
/cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep:*
SUMMARIES
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280.699 Million cell updates/sec
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Outery Outery Description 83 100.0 380 10 US-09-936-883C-2 Sequence 83 100.0 380 12 US-10-126-052A-63 Sequence 83 100.0 380 14 US-60-443-566-3006 Sequence 83 100.0 380 14 US-60-443-566-306 Sequence 83 100.0 380 14 US-60-443-4692 Sequence 83 100.0 380 14 US-60-465-241-4692 Sequence 83 100.0 380 14 US-60-465-241-4692 Sequence 83 11 372 14 US-60-465-241-4692 Sequence 83 11 372 14 US-60-445-444-5630 Sequence 83 11 372 14 US-60-445-241-5330 Sequence 83 11 372 12 US-10-198-070-62 Sequence 83 11 392 12 US-10-198-070-62 Sequence 83 11 392 12 US-10-198-070-67 Sequence 83 11 392 12 US-10-198-070-67 Sequence 83 12 392 12 US-10-198-070-67 Sequence 80 1	19	18	16	15	14	13	12	<u>1</u>	10	9	œ	7	0	. С т	4	· w	· N	. ب	Result No.
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Sequence Sequence	US-60-465-241-7456	US-60-463-566-4399	US-10-325-745-10	US-10-294-025-947	PCT-US02-07215B-14	US-10-198-070-70	US-10-198-070-67	US-10-198-070-62	US-10-294-025-946	US-60-465-241-5630	US-60-455-444-5630	US-60-443-566-3717	US-09-936-883C-21	US-60-465-241-4692	US-60-455-444-4692	US-60-443-566-3006	US-10-126-052A-263	US-09-936-883C-2	ID
on 203, Appli 204, Appli 204, Apple 21, Apple 21, Apple 21, Apple 21, Apple 21, Apple 26, Apple 26, Apple 26, Apple 27, Apple	7456	4399	Sequence 10, Appl	Sequence 947, App	Sequence 14, Appl	Sequence 70, Appl	67	62	946,	5630	5630	3717	21,	4692	4692,	3006	263	'n	Description

45	44	43	42	41	40	39	38	37	36	35	34	ယ	32	31	30	29	28	27	26	25	24	23	22	21	6
62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	63	63	64	64	65	67	67	67	67	
74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	75.9	75.9	77.1	77.1	78.3	80.7	80.7	80.7	80.7	
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14	N	N	14	14	14	14	14	14	12	14	14	12	12	12	12	12	12	12	N	10	12	14	14	14	į
US-60-448-285-3	PCT-US02-07215B-9	PCT-US03-12731-14	US-60-466-412-12141	US-60-466-412-12140	US-60-453-050-12141	US-60-453-050-12140	US-60-453-135-12141	US-60-453-135-12140	US-10-144-779-358	US-60-474-733-297	US-60-448-285-7	US-10-130-138A-150	us-10-437-963-184620	US-10-130-138A-110	US-10-130-138A-108	US-10-424-599-199591	US-10-424-599-199590	US-10-144-779-361	PCT-US02-07215B-19	US-09-936-883C-19	US-10-313-986-112	US-60-465-241-7457	US-60-455-444-7457	US-60-443-566-4400	20 440 200 440
Sequence 3, Appli	Sequence 9, Appli	Sequence 14, Appl	Sequence 12141, A	Sequence 12140, A	Sequence 12141, A	Sequence 12140, A	Sequence 12141, A	Sequence 12140, A	Sequence 358, App	Sequence 297, App	Sequence 7, Appli	Sequence 150, App	Sequence 184620,		Sequence 108, App	Sequence 199591,	Sequence 199590,	Sequence 361, App	Sequence 19, Appl	Sequence 19, Appl	Sequence 112, App	Sequence 7457, Ap	Sequence 7457, Ap	•	ddir torr pompon

ALIGNMENTS

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RESULT 2
US-10-126-052A-263
Sequence 263, Application US/10126052A
GENERAL INFORMATION:
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-936-883C-2
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: 1
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Applicat GENERAL INFORMATION:
APPLICANT: Aziz, Natasha
APPLICANT: Murray, Richard
APPLICANT: Eos Biotechnology, Inc.
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and
TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer
FILE REFERENCE: 018501-001530US
CURRENT APPLICATION NUMBER: US/10/126,052A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A Method for Detecting Megsin Protein and
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: JP
PRIOR ETLING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                         Patentin Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                            Score 83; DB 10;
Pred. No. 4.2e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                Length 380;
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US-60-455-444-4692

Sequence 4692, Application US/60455444

GENERAL INFORMATION:

APPLICANT: CARGILL, Michele
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens 
US-60-443-566-3006
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 25102
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3006
LENGTH: 380
SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4692 LENGTH: 380
                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3006, Application US/60443566
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LENGTH: 380
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                                                                                                                    TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DET: FILE REFERENCE: CL001455
                                                        CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/60/443,566
CURRENT FILING DATE: 2003-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: GENETIC POLYMORPHISMS TITLE OF INVENTION: RHEUMATOID ARTHRITIS, FILE REFERENCE: CL001447
                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR FILING DATE: 2002-04-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 691
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PRIOR FILING DATE: 2001-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-05-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 60/290,492
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APPLICATION NUMBER: US 60/284,770
FILING DATE: 2001-04-18
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17; Conserv
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17; Conserv
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100.0%; Pred. No. 4.:
tive 0; Mismatches
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hes 0;
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4.2e-05;
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                                                                                                                                      METHODS OF DETECTION AND USES THEREOF
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US-60-465-241-4692
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CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 259418
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4692
LENGTH: 380
TYPE: PRT
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Best Local Similarity
Matches 17; Conserv
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APPLICANT: MIYATA, Toshio
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APPLICANT: CARGILL, Michele

APPLICANT: BEGOVICH, Ann
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                                                                        Query Match
Best Local :
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Best Local :
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                                                          Matches
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                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: A Method for Detecting Megsin Protein and TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DP1PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETIFILE REFERENCE: CL001468
                                                                                                                                                                                          PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-03-19
                                                                                                                                               LENGTH: 368
TYPE: PRT
                                                                                                                                   ORGANISM: Mus musculus
 313
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                1 SYIEVTEEGTEATAAT 16
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17; Conserv
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                                                                      Similarity
SFIEVSEEGTEATAAT 328
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                                                                        Score 69;
Pred. No.
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Pred. No. 4.2e-05
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Pred. No. 4.2e-05;
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0.0075;
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RESULT 7

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CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SOPTWARR: FRASTSEQ for Windows Version 4.0
SEQ ID NO 5630
LENGTH: 372
TYPE: PRT
ORGANISM: Homo sapiens
US-60-465-241-5630
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, Application US; Sequence 3717, Application US; GENERAL INFORMATION:
, APPLICANT: CARGILL, Michele; APPLICANT: BEGOVICH, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001447
CURRENT APPLICATION NUMBER: US/60/443,566
CURRENT FILING DATE: 2003-01-30
NUMBER OF SEQ ID NOS: 25102
SOOTWARE: F8stSEQ for Windows Version 4.0
SEQ ID NO 3717
LENGTH: 372
TYPE: PRT
ORGANISM: Homo sapiens
US-60-443-566-3717
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SOFTWARE: FastSEQ for Windows Version 4.0
: SEQ ID NO 5630
: LENGTH: 372
: TYPE: PRT
: ORGANISM: Homo sapiens
US-60-455-444-5630
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US-60-455-444-5630
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLOU468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5630, Application US/60455444
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
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Best Local
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CURRENT FILING DATE: 2003-03-18
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1 Similarity 76.5%;
13; Conservation
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Pred. No. 0.0076;
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APPLICANT: Xu, Jiangchun
APPLICANT: Ku, Jiangchun
APPLICANT: Ktolk, John A.
APPLICANT: Kalos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C39
CURRENT APPLICATION NUMBER: US/10/294,025
CURRENT FILING DATE: 2002-11-12
NUMBER OF SEQ ID NOS: 1038
SOFTWARE: FRSTSEQ for Windows Version 3.0
SEQ ID NO 946
LENGTH: 379
TYPE: PRT
ORGANISM: Homo Sapiens
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US-10-294-025-946
                                                                                                                              ; ORGANISM: HOMO
US-10-198-070-62
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Best Local Similarity
Matches 13; Conserv
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APPLICANT: AVERBACK, PAUL APPLICANT: GEMMELL, JACK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 946, Application US/10294025 GENERAL INFORMATION:
                                                     Matches
                                                                                         Query Match
                                                                                                                                                                                  SEQ ID NO 62
LENGTH: 392
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Matches 13; Conserv
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                                                                                                                                                                                                                                                       APPLICANT: GEMMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TREATMENT OF TUMORS AND OTTITLE OF INVENTION: CONDITIONS REQUIRING THE REMOVAL OR DESTRUCTION OF TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
CURRENT FAPPLICATION NUMBER: 05/10/198,070
CURRENT FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR APPLICATION NUMBER: 60/31,477
PRIOR APPLICATION NUMBER: 60/331,477
PRIOR PILING DATE: 2001-11-16
                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 125
SOFTWARE: Patentin Ver. 2
                                                                                                                                                                  TYPE: PRT
                                                   Local Similarity 76. es 13; Conservative
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322 SYLDVSEEGTEAAAATG 338
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1 SYIEVTEEGTEATAATG 17
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76.5%;
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76.5%;
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Pred. No. 0.
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Pred. No. 0.0076;
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                                                                       DB 12;
0.0081;
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335 SYLDVSEEGTEAAAATG 351

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RESULT 14
PCT-US02-07215B-14
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; ORGANISM: Homo sapiens
US-10-198-070-67
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US-10-198-070-67
                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens US-10-198-070-70
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US-10-198-070-70
                                                                                                                                         Query Match
Best Local Similarity 76.5
                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 125
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 70
LENGTH: 392
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 125
SOFTWARE: PatentIn Ver. 2.
SEQ ID NO 67
LENGTH: 392
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: GEMMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TREATMENT OF TUMORS AND OTHER
TITLE OF INVENTION: CONDITIONS REQUIRING THE REMOVAL OR DESTRUCTION OF
TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
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APPLICANT: GEMMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TREATMENT OF TUMORS AND OTHER
TITLE OF INVENTION: CONDITIONS REQUIRING THE REMOVAL OR DESTRUCTION OF
TITLE OF INVENTION: CELLS
FILE REFERENCE: 59003.000008
                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/198,070 CURRENT FILING DATE: 2002-07-19 PRIOR APPLICATION NUMBER: 60/306,161 PRIOR FILING DATE: 2001-07-19 PRIOR APPLICATION NUMBER: 60/306,150 PRIOR FILING DATE: 2001-07-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/198,070 CURRENT FILING DATE: 2002-07-19 PRIOR APPLICATION NUMBER: 60/306,161 PRIOR FILING DATE: 2001-07-19 PRIOR APPLICATION NUMBER: 60/306,150 PRIOR APPLICATION NUMBER: 60/306,150 PRIOR FILING DATE: 2001-07-19
                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: AVERBACK, PAUL APPLICANT: GEMMELL, JACK
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Local Similarity 76.5%;
hes 13; Conservative
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76.5%; Pred. No. 0.
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Pred. No. 0.0081;
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0.0081;
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CURRENT APPLICATION NUMBER: PCT/US02/07215B
CURRENT FILING DATE: 2002-03-08
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin version 3.1
SEQ ID NO 14
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APPLICANT: Clarke, Howard RG
APPLICANT: DuBose, Robert F
APPLICANT: Wiley, Steven R
TITLE OF INVENTION: HUMAN SERPIN POLYPEPTIDES
FILE REFERENCE: 3223-WO
                                                                                     NAME/KEY: MISC_FEATURE LOCATION: (378)...(378) OTHER INFORMATION: unsure
NAME/KEY: MISC_FEATURE LOCATION: (425)..(425) OTHER INFORMATION: unsure
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OTHER INFORMATION: unsure
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NAME/KEY: MISC_FEATURE
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OTHER INFORMATION: unsure
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OTHER INFORMATION: unsure
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OTHER INFORMATION: unsure
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THER INFORMATION: unsure
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RESULT 15
US-10-294-025-947

Sequence 947, Application US/10294025

GENERAL INFORMATION:
APPLICANT: Xu, Jiangchun
APPLICANT: Xtolk, John A.
APPLICANT: Kalos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121,427C29

CURRENT FILING DATE: 2002-11-12

NUMBER OF SEO ID NOS: 1038

SOFTWARE: FASTSEQ for Windows Version 3.0

SEO ID NO 947

LEUGTH: 617

TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: VARIANT
LOCATION: 369, 315, 225, 232, 233, 289, 309, 318, 322, 331, 332, 367,
LOCATION: 369, 374, 378, 425, 430

OTHER INFORMATION: Xaa - Any Amino Acid

US-10-294-025-947
Search completed: July 11, 2003, 12:35:07 
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: LOCATION: (430)..(430)
: OTHER INFORMATION: unsure
PCT-US02-07215B-14
                                                                                                                                                                 Query Match 83.1%; Score 69; DB 12; Length 617; Best Local Similarity 76.5%; Pred. No. 0.013; Matches 13; Conservative 3; Mismatches 1; Indels
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Best Local Similarity 76.5%;
Matches 13; Conservative
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560 SYLDVSEEGTEAAAATG 576
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560 SYLDVSEEGTEAAAATG 576
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Title:
Perfect score:
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Copyright (c) 1993 - 2003 Compus
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  5 US-09-140-719-5

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17 US-60-160-203-4173

17 US-60-188-162-4539

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Sequence 5, Appli
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Sequence 4173, Ap
Sequence 4539, Ap
Sequence 34, Appl
Sequence 34, Appl
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-60-202-18	S-60-195-052-J	60-195-	-60-195-052-1	-09-791-537-1	-US98-00615-88	-60-333-726-	-10-083-357-13	-08-781-7	-08-781-734-	-US98-00615-22	-60-360-039-	-09-184-082-2	-09-540-2091	0-179-131-	-10-179-1	9-847-2081	-09-847-208-	-09-791-537-	-09-791-537-	360-039-	-60-096-409-	-09-248-796-	-09-417-507	S01-08631-	-09-791-537-	-09-791-537	-60-118-610-5	-09-856-679-12	-10-216-583-121	s-09-760-469-12	S-08-091-0	-08-091-028-5	S-10-110-030-2	S-10-091-442-3	S-09-936-883A-2	US-09-791-537-281	100-500-0073-
Sequence 189, App	equence 1000,	1149,	equence 10		88, App	13			e 22,	Sequence 22, Appl	Sequence 20450, A	Sequence 2, Appli	9878	5552	Sequence 7870, Ap	53	53,	963	8066,	8700,	e 17065	e 17065,	Sequence 34770,	3658	928		C.	equence 12,	1213,	e 12	equence 5,	5, Ar	e 2,	ω.	2, Appl	Sequence 2, Appr Sequence 281, App	ر ا

ALIGNMENTS

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US-09-140-719-5
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GENERAL INFORMATION:
APPLICANT: TSUJIM
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
                                                                                                                                                                                                                                                                                           APPLICANT: MIURA, Kenju
APPLICANT: ISHIDA, Nobuhiro
APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMAGUCHI, KOZO
APPLICANT: YAMAGUCHI, NOZOMİ
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                       STREET:
                                                                                                                                                      CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
                                                                                                                                                                                                                                                                ADDRESSEE:
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                                                                                                                                                                                                                                            E: Burns, Doane, Swecker & Mathis P.O. Box 1404
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TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
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Sequence :

PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/474,661

08-AUG-1998

FILING DATE:

07-JUN-1995

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TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 5:
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LENGTH: 9 amino acids
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TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
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les 9; Conserv
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STRANDEDNESS: sir
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: JP 4-FILING DATE: 17-JUL-1992
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                                                                                                      COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                         YAMAGUCHI, NOZOMİ
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
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                                                 APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <Unknown>
APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                      COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                      STATE: Virginia
                                                                                                                                                                                                                                                                         CITY: Alexandria
                                                                                                                                                                                                                                                                                      ADDRESSEE: Burns, Doane, Swecker & Mathis STREET: P.O. Box 1404
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linear
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YAMAICHI, Kozo
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TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
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Pred. No.
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RESULT 4
US-60-188-162-4539
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US-60-160-203-4173
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                                APPLICANT: Beasley, Ellen
TITLE OF INVENTION: ICSULAN
TITLE OF INVENTION: UCLES
TITLE OF INVENTION: USES 7
FILE REFERENCE: CL000518
                                                                                                                           Sequence 4539, Appli GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/60/160,203
CURRENT FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 6374
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 4173
LENGTH: 78
TYPE: PRT
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TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS AND
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CL000116
CURRENT APPLICATION NUMBER: US/60/188,162
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nes 9; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 001560-247 TELECOMMUNICATION INFORMATION:
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1 QYLRALGIK 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
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TELEFAX: (703) 836-2021
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 9 amino acids
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                                                                                                                                              Application US/60188162
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                                                      USES THEREOF
                                                                       ISOLATED HUMAN SECRETED PROTEINS, AND NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS, AND
                                                                                                                                                                                                                                                                                                                                    100.0%;
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US-60-188-162-4539
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                             Query Match
   Matches
                                                                                                                                TELEFAX: (703) 836-6620 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                     FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker & Mathis
STREET: George Mason Bldg., Washington & Prince Sts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 34
                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                    LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/091,028A FILING DATE: 14-JUL-1993 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Alexandria
STATE: Virginia
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les 9; Conserv
Local Similarity
les 9; Conservat
                                                                                        TYPE: amino acid
TOPOLOGY: linear
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NAKAZATO, Hiroshi
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   Conservative
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                                                                                                                                                                               (703) 836-6620
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               100.0%;
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             Score 44;
Pred. No. 6
Mismatches
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                           DB 4; Length 380;
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Gaps
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US-09-140-719-34
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GENERAL INFORMATION
                                                                              Query Match
Best Local :
                                                             Matches
                                                                                                                                                                                                                        TELEFAX: (703) 836-20 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
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APPLICATION NUMBER:
FILING DATE: 14-JUL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: YAMAGUCHI, NOZOMI
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER:
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PRIOR APPLICATION NUMBER: US 08/474,661
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
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289 QYLRALGLK
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                                                            Similarity 9; Conserv
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P.O. Box 1404
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YAMAICHI, KOZO
YAMAGUCHI, NOZOMi
                                                               Conservative
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NAKAZATO, Hiroshi
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08-AUG-1998
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Pred. No.
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   SOFTWARE: F
SEQ ID NO 2
                                                                                                                                                                                                             Sequence 2, Application US, GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
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                                                                                   CURRENT APPLICATION NUMBER: US/09/936,883A CURRENT FILING DATE: 2001-12-21 PRIOR APPLICATION NUMBER: JP 1999-75305 PRIOR FILING DATE: 1999-03-19
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
                                                                                                                                                                            TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use TITLE OF INVENTION: Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
                    NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn Ver. 2.0
                                                    PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-10-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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EQ ID NO 2
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                                                                                                                                                              FILE REFERENCE: F2-101DP1PCT
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ORGANISM: Homo sapiens
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nes 9; Conserv
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Pred. No.
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Query Match
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SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQ
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Best Local Similarity
                                                                                                                                                    INFORMATION FOR SEQ ID NO: 34:
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                                                                                                                                                                                      TELEPHONE: (703) 836-6620
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APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                                                                SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: Virginia COUNTRY: United States ZIP: 22313-1404
                                                                        TOPOLOGY:
                                                                                          TYPE: amino acids
                                                                                                                                                                                                                                             NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/140,719
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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Pred. No.
                                  ID NO: 34:
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Score 44;

DB 24;

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APPLICANT: Miyata,

10-110-030-2

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; TYPE: PRT ; ORGANISM: Homo sapiens US-10-110-030-2
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                                                                                                                                                                     COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                 FILING DATE: 14-JUL-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
              APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992 PRIOR APPLICATION DATA:
                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                 CITY: Alexandria
STATE: Virginia
                                                                                                                       APPLICATION NUMBER: US/08/091,028
                                                                                                                                                                                                                                                  ZIP: 22313-1404
                                                                                                                                                                                                                                                                  COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     289 QYLRALGLK 297
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9; Conserv
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                                                                                                                                                                                                                                                                                                                 E: Burns, Doane, Swecker & Mathis
George Mason Bldg., Washington & Prince Sts
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ilarity 100.0%;
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TSURUOKA, Nobuo
NAKAZATO, Hiroshi
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JP 5-067339
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0; Mismatches
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Pred. No.
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Best Local S
Matches 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (703) 836-662
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                               TELEFAX: (703) 836-66
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 00
REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                       APPLICATION NUMBER: JP 5
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
                                                                                                                                                                                                           APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US.
FILING DATE: 14-JUL-19
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                             REFERENCE/DOCKET NUMBER: 00
                                                                                                                     NAME: REA, TERESA STANEK REGISTRATION NUMBER: 30,
                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Crane-Feury, Sharon E
REGISTRATION NUMBER: 36,113
                                                                                                                                                                                                                                                                                                                                                        SOFTWARE:
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STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
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22313-1404
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8; Conservative
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George Mason Bldg., Washington & Prince Sts
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YAMAICHI, KOZO
YAMAGUCHI, NOZOmi
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NAKAZATO, Hiroshi
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14-JUL-1993
                           3) 836
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, WO: 5:
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                                                                                                        001560-204
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Pred. No.
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Query Match Best Local

Local

Matches

SEQ ID NO 2

0;

ENGTH: 380

US-08-091-028-5

SENERAL INFORMA

APPLICANT:

TITLE OF

STREET: ADDRESSEE:

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; TYPE: amino acid
; STRANDEDNESS: sing
; TOPOLOGY: linear
; MOLECULE TYPE: pepti
US-08-091-028A-5
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US-09-760-469-1213
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 1983
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1213
LENGTH: 598
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PTZ54
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Matches 8; Conserv
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                                PRIOR APPLICATION NUMBER: 60/225,447
PRIOR FILING DATE: 2000-08-14
PRIOR APPLICATION NUMBER: 60/218,290
PRIOR FILING DATE: 2000-07-14
                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/216,583
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/760,469
CURRENT FILING DATE: 2001-01-16
                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                             RIOR APPLICATION NUMBER: 09/760,469
                                                                                                                                                                                                                                                                                                                                                                                                                   ILE REFERENCE: PTZ54C1N
                                                                                                                                                                                                                                                                        FILING DATE: 2001-01-16
APPLICATION NUMBER: 60/179,065
FILING DATE: 2000-01-31
APPLICATION NUMBER: 60/180,628
FILING DATE: 2000-02-04
                                                                                                FILING DATE: 2000-07-26
APPLICATION NUMBER: 60/217,496
FILING DATE: 2000-07-11
                                                                                                                                                                      APPLICATION NUMBER: 60/225,758 FILING DATE: 2000-08-14
                                                                                                                                                                                                                       APPLICATION NUMBER: 60/217,487
                                                                                                                                                     APPLICATION NUMBER: 60/220,963
                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/214,886
                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       455 RYLRALGL 462
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Prior Application data removed - See File Wrapper or PALM SEQ ID NOS: 1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10216583
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100.0%; Pr
0;
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87.5%;
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    Mismatches

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Pred. No. 6.5e+02;
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Pred. No.
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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1213
; LENGTH: 598
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-216-583-1213

Query Match 79.5%; Score 35; DB 26; Length 598;
Best Local Similarity 87.5%; Pred. No. 6.5e+02;
Matches 7; Conservative 1; Mismatches 0; Gaps

Qy 1 QYLRALGL 8
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Db 455 RYLRALGL 462

Search completed: July 11, 2003, 12:27:33

Job time: 30.3285 secs
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Minimum DB
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No.
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1: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep:*

2: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep4:*

3: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep4:*

4: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep4:*

5: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*

6: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*

6: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*

7: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*

9: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

9: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

10: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

11: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

12: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep4:*

13: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep4:*

14: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep4:*

14: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep4:*
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              US-09-936-883C-2
US-10-126-052A-263
US-60-443-566-3006
US-60-445-44-692
US-10-437-963-150051
US-10-437-963-15070
US-10-369-493-8700
US-10-369-493-870450
US-10-425-122-44-60805
US-10-425-114-50805
US-10-425-114-50803
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280.699 Million cell updates/sec
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              Sequence 8700, Ap
Sequence 47577, A
Sequence 20450, A
Sequence 115178,
Sequence 60805, A
Sequence 608319, A
Sequence 60833, A
Sequence 10178, A
Sequence 10374, A
Sequence 10374, A
Sequence 10374, A
Sequence 62321, A
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Sequence 263, App
Sequence 3006, Ap
Sequence 4692, Ap
Sequence 4692, Ap
Sequence 150051,
Sequence 177663,
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sequence 2333, Ap		702		Sequence 702, App		Sequence 13699, A	Sequence 7275, Ap		Sequence 13699, A			4405,	Sequence 742, App	8988,	Sequence 743, App		1891	Sequence 15, Appl	Sequence 248, App	Sequence 6303, Ap	Sequence 48213, A	Sequence 198078,	Sequence 66837, A	Sequence 380, App	Sequence 115387,	Sequence 318, App

ALIGNMENTS

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Sequence 2, Application US/09936883C

GENERAL INFORMATION:

APPLICANT: MIYATA, Toshio

TITLE OF INVENTION: A Method for Detecting Megsin Protein and TITLE OF INVENTION: Thereof

FILE REFERENCE: F2-101DP1PCT

CURRENT APPLICATION NUMBER: US/09/936,883C

CURRENT FILING DATE: 2001-12-21

PRIOR APPLICATION NUMBER: JP 1999-75305

PRIOR FILING DATE: 1999-0306623

PRIOR APPLICATION NUMBER: JP 1999-306623

PRIOR APPLICATION NUMBER: JP 1999-306623
                                                                                                                                          RESULT 2
US-10-126-052A-263
US-10-126-052A-263
; Sequence 263, Application US/10126052A
; GENERAL INFORMATION:
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Best Local S
Matches 9
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LENGTH: 380
TYPE: PRT
ORGANISM: Homo sapiens
                  APPLICANT: Aziz, Natasha
APPLICANT: Murray, Richard
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and
TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer
FILE REFERENCE: 018501-001530US
CURRENT APPLICATION NUMBER: US/10/126,052A
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nes 9; Conserv
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CURRENT FILING DATE: 2002-04-18
PRIOR APPLICATION NUMBER: US 60/284,770
PRIOR FILING DATE: 2001-04-18
PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR FILING DATE: 2001-05-10

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RESULT 4
US-60-455-444-4692
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-443-566-3006
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US-60-443-566-3006
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; ORGANISM: Homo sapiens
US-10-126-052A-263
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PRIOR FILING DATE: 2001-11-09
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR FILING DATE: 2002-04-12
                                                                                             Sequence 4692, Application US/60455444
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: REGUMATOID ARTHRITIS, METHODS OF DETI-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3006, Application US/60443566
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
NUMBER OF SEQ ID NOS: 50986
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4692
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TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETI
FILE REFERENCE: CL001447
CUURENT APPLICATION NUMBER: US/60/443,566
CURRENT FILING DATE: 2003-01-30
NUMBER OF SEQ.ID NOS: 25102
SOFTWARE: FASTSEQ for Windows Version 4.0
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                                                        CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
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SOFTWARE: Patentin Ver. 2.1
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Similarity 100.0%;
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Pred. No.
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1 QYLRALGLK 9

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; OTHER INFORMATION: Clone ID: PAT_MRT4530_50323C.1.pep US-10-437-963-150051
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; ORGANISM: Homo sapiens
US-60-455-444-4692
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US-60-465-241-4692
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                                                                                                                                             TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(53221)B CUGRENT APPLICATION NUMBER: US/10/437,963 CURRENT FILING DATE: 2003-05-14 NUMBER OF SEQ ID NOS: 204966 SEQ ID NOS: 204966 SEQ ID NOS: 204966 SEQ ID NO 150051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETE FILE REFERENCE: CLOO1468 CURRENT APPLICATION NUMBER: US/60/465,241 CURRENT FILING DATE: 2003-04-23 NUMBER OF SEQ ID NOS: 258418 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4692 LENGTH: 380
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 150051, Application US/10437963 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4692, Application US/60465241
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
                                Query Match
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: La Rosa, Thomas J. APPLICANT: Kovalic, David K.
                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
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                                                                                                                                 TYPE: PRT
                                                                                                                ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
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Local Similarity les 7; Conserv
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Wu, Wei
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Li, Ping
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   Conservative
                 81.8%;
 Score 36; DB
Pred. No. 96;
1; Mismatches
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Pred. No. 1;
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                                DB 12; Length 730;
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RESULT 9
US-10-282-122A-47577
; Sequence 47577, Application US/10282122A
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SEQ ID NO 117663
LENGTH: 1293
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Best Local Similarity
Matches 6; Conserv
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LENGTH: 337
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                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10(52052)B CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement EILE REFERENCE: 38-21(53221)B CURRENT APPLICATION NUMBER: US/10/437,963 CURRENT FILING DATE: 2003-05-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Cao, APPLICANT: Hin)
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equence 117663, A
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TYPE: PRT
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ORGANISM: Oryza sativa
                                                                                                                                                                Local Similarity 66. 
es 6; Conservative
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                                                                                            QYARAMGLR 190
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Li, Ping
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Pred. No.
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                                                                                                                                                                                                                                                     Sequence 20450, Application US/10369493 GENERAL INFORMATION:
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Best Local
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                                                                   TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS TITLE OF INVENTION: PLANTS WITH INPROVED PROPERTIES FILE REFERENCE: 38-10(52052)B CURRENT APPLICATION NUMBER: US/10/369,493 CURRENT FILING DATE: 2003-02-28
                  PRIOR APPLICATION NUMBER: US 60/360,039 PRIOR FILING DATE: 2002-02-21 NUMBER OF SEQ ID NOS: 47374
                                                                                                                                                            APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
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PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
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   ID NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/242,578
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LING DATE: 2000-11-27
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Malone, Cheryl
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Forsyth, R.
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US-10-425-114-60805
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(53221)B CURRENT APPLICATION NUMBER: US/10/437,963 CURRENT FILING DATE: 2003-05-14 NUMBER OF SEQ ID NO 115178
SEQ ID NO 115178
LENGTH: 582
                                                                                                      NUMBER OF SEQ ID NOS:
SEQ ID NO 60805
                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION
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APPLICANT:
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APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
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                                    ORGANISM: Zea mays FEATURE:
                                                                   TYPE: PRT
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            OTHER INFORMATION: Clone ID: LIB3356-048-F4_FLI.pep
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Pred. No. 3.1e+02;
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Query Match
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; OTHER INFORMATION: Clone ID: LIB3354-105-E8_FLI.pep
US-10-425-114-60833
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TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 60833
LENGTH: 150
TWORLD TOTAL
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CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 59319
LENGTH: 127
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Best Local :
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APPLICANT: Liu, Jingdong
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Best Local
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APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
FILE REFERENCE: 38-21(53313)B
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                                                                                                                                                ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 114 LRALGLK 120
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      3 LRALGLK 9
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7; Conserva
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                                                                                                                                                                                                                                                                                                                     Kovalic, David K.
Screen, Steven E
Tabaska, Jack E
                                                                                                                                                                                                                                                                                                                                                                      Zhou, Yihua
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Screen, Steven E
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                                    Conservative
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100.0%;
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                                                    Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 32;
Pred. No.
                                     Mismatches
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88;
                                                                   DB 12;
                                                    .1e+02;
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                                                                 Length 150;
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                                    Indels
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                                Gaps
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137 LRALGLK 143

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RESULT 15
US-10-425-114-71125
US-10-425-114-71125
Sequence 71125, Application US/10425114
GEMERAL IMFORMATION:
APPLICANT: LIW, Jingdong
APPLICANT: Zhou, Yihau
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwel
ITILE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
ITILE OF INVENTION: Nucleic Molecules and Other Molecules Associated With
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
SEQ ID NO 71125
SEQ ID NO 71125
LENGTH: 159
TYPE: PRT
ORGANISM: Zea mays
FEATURE:
OTHER INFORMATION: Clone ID: LIB3597-011-F8_FLI.pep
US-10-425-114-71125
Query Match
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY
JIRALGLK 9
DB 114 LRALGLK 120
Search completed: July 11, 2003, 12:35:09
Job time: 10.5574 sees
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OM protein - protein search, using sw model
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
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Gapop 10.0 , Gapext 0.5
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98
1 ADLSGIASGGRLYISRWMGK 20
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// Cgn2_6/ptodata/1/paa/US084_COMB.pep: *
// Cgn2_6/ptodata/1/paa/US085_COMB.pep: *
// Cgn2_6/ptodata/1/paa/US086_COMB.pep: *
// Cgn2_6/ptodata/1/paa/US086_COMB.pep: *
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cgn2_6/ptodata/1/paa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/paa/US06_COMB.pep:*
/cgn2_6/ptodata/1/paa/US07_COMB.pep:*
/cgn2_6/ptodata/1/paa/US080_COMB.pep:*
/cgn2_6/ptodata/1/paa/US081_COMB.pep:*
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/cgn2_6/ptodata/1/paa/US083_COMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

654321	Result
1 98 100.0 2 98 100.0 3 92 93.9 4 92 93.9 5 90 91.8 6 90 91.8	Score
100.0 100.0 93.9 93.9 91.8 91.8	Query Match Length DB ID
20 20 20 20 20 78 118	Length 1
15 24 4 27 27	8
20 15 US-09-140-719-6 20 24 US-10-091-442-6 20 4 US-08-091-028-6 20 4 US-08-091-028A-6 20 4 US-08-091-028A-6 78 27 US-60-160-203-4173 118 27 US-60-188-162-4539	ID
Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 4, Appli Sequence 4173, Ap	Description

ALIGNMENTS

PRIOR APPLICATION DATA:

FILING DATE: 08-AUG-1998

APPLICATION NUMBER: CLASSIFICATION:

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US-10-091-442-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/10091442 GENERAL INFORMATION:
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (703) 836-202
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: JP 4-
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER:
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                                                                                                                        ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                      PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 100.
20; Conservative
                                                                                                                                                                                                                                                           ADDRESSEE: Burns, Doane, Swecker & Mathis STREET: P.O. Box 1404
CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADLSGIASGGRLYISRMMGK 20
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RATION NUMBER: 39,300
                                                                                                                                                                                                                         COUNTRY: United States ZIP: 22313-1404
APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                          KURIHARA, Tatsuya
YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                MIURA, Kenju
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NAKAZATO, Hiroshi
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07-JUN-1995
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) 836-2021
) ID NO: 6:
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Nobuhiro
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Pred. No. 1.4e-08
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STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-091-442-6
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Best Local 9
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: YAMAGUCHI, NOZOM1
TITLE OF INVENTION: MEAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 33
                                                                                                   CLASSIFICATION: 435 PRIOR APPLICATION DATA:
ATTORNEY/AGENT INFORMATION:
                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
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                                                                 APPLICATION NUMBER: JP 4-FILING DATE: 17-JUL-1992
                                                                                                                                      APPLICATION NUMBER: FILING DATE: 14-JUI
                                                                                                                                                                                                                                                                                                                    CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                 STREET:
                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                 Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 20 amino acids TYPE: amino acid
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APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/474,661 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                E: Burns, Doane, Swe
George Mason Bldg.,
                                                                                                                                                                                                                                                                                                United States
                                                                                                                                                                                                                                                                                                                                                                                                                                   KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NOZOMi
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ISHIDA, Nobuhiro
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NAKAZATO, Hiroshi
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                                                                                                                                      14-JUL-1993
                JMBER: JP 5-067339
04-MAR-1993
                                                                                                                                                        US/08/091,028
                                                                                     JP 4-212305
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                                                                                                                                                                                                                                                                                                                                                                    Swecker & Mathis
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Pred. No. 1.4e-08;
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GENERAL INFORMA
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INFORMATION FOR SEQ ID NO:
                                                                                      TELEFAX: (703) 836-6620 INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
APPLICATION NUMBER: JP 5-067339
                                                                                                                      TELEPHONE: (703) 836-6620
                                                                                                                                                     APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
REGISTRATION NUMBER: 30,427
REFERENCE/DOCKET NUMBER: 001560-204
                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
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                                                SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
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hes 19; Conservative
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TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                   FILING DATE: 14-JUL-1993
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Alexandria
STATE: Virginia
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REFERENCE/DOCKET NUMBER: 001560-204
                LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/091,028A
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George Mason Bldg., Washington & Prince Sts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  United States
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                                                                                                       (703)
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linear
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           single
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95.0%;
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US-60-188-162-4539
; Sequence 4539, Application US/60188162
; GENERAL INFORMATION:
; APPLICANT: Beasley, Ellen
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SOFTWARE: FRASTSEQ for Windows Version 4.0
SEQ ID NO 4173

LENGTH: 78

TYPE: PRT
                                                                                                                                                                   NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 4539
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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GENERAL INFORMATION:
APPLICANT: BONAZZI, VIVIEN
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Best Local Similarity
Matches 19; Conserv
                                                       Matches
                                                                    Query Match
Best Local :
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Best Local :
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CURRENT FILING DATE: 2000-05-09
                                                                                                                                                                                                                                                     TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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CURRENT FILING DATE: 1999-10-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: ISOLATED HUMITITLE OF INVENTION: NUCLEIC ACID TITLE OF INVENTION: USES THEREOF
                                                                                                                                                                                                                                           FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: CL000116
                                                                                                                                          LENGTH: 11
TYPE: PRT
                                                     Local Similarity
nes 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 19; Conserv
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58 ADLSGIASGGRLYISRMMHK 77
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                1 ADLSGIASGGRLYISRMMGK 20
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                                                       Conservative
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95.0%;
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95.0%;
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Pred. No.
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Pred. No. 1.
                                                                    Score 90; I
Pred. No. 2
                                                       Mismatches
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1.5e-06;
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RESULT 7
US-08-09-028A-34
; Sequence 34, Application US/08091028A
; GENERAL INFORMATION:
; APPLICANT: TSUJIMOTO, Masafumi

PPLICANT:

IWASA, Fuyuki

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US-09-140-719-34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                     APPLICANT:
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APPLICANT:
APPLICANT:
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REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEFAX: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker & Mathis
STREET: George Mason Bldg., Washington & Prince Sts.
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CURRENT APPLICATION DATA:
                                  TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 380 amino acids TYPE: amino acid TOPOLOGY: linear
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 ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                  305 ADLSGIASGGRLYISRMMHK 324
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19; Conserv
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                                                                                                                                                                                                                                              Application US/09140719
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                                                                                                                                                         TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
                                                                                  KURIHARA, Tatsuya
YAMAICHI, Kozo
                                                                                                                                      MIURA, Kenju
                                                                   YAMAGUCHI,
                                                                                                                                                                                          IWASA, Fuyuki
                                                                                                                                                                                                            TSUJIMOTO, Masafumi
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NAKAZATO, Hiroshi
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                                                                                                                        SHIDA, Nobuhiro
Burns, Doane, Swecker & Mathis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
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N: 435
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95.0%; Pred. No. 9.3e-06;
Live 0; Mismatches 1
                                                                       Nozomi
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; LENGTH: 380
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-508-997A-2
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Best Local S
Matches 19
                                                                                                                         PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-99-22
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO. 2
                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein
                                                                                                                                                                                                                                                                                                                                 Sequence 2,
                 Query Match
                                                                                                                                                                                                                 FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: MCGOWAT, MALCOLM K.
REGISTRATION NUMBER: 39,300
REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: JP 4-212305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 380 amino acids
TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                           305 ADLSGIASGGRLYISRMMHK 324
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                                                                                                                                                                                                                                                                                                                               Application US/09508997A
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NO: 34:
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91.8%;
95.0%;
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Pred. No. 9.3e-06;
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Score 90; DB 19;
Pred. No. 9.3e-06;
               Length 380,
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Best Local Similarity Matches 19; Conserv

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US-09-791-537-281
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-936-883A-2
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                                                                                                            US-10-091-442-34
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US-09-936-883A-2
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GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A Method for Detecting Megsin Protein and
TITLE OF INVENTION: Thereof
FILE REFERENCE: FZ-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883A
CURRENT FILING DATE: 2001-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
TITLE OF INVENTION: METHODS OF USE THEREOF
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 281
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Best Local
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                                                                          Sequence 34, Application US/10091442 GENERAL INFORMATION:
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SEQ ID NO 2
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                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-03-19 PRIOR APPLICATION NUMBER: JP
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Blonomix, Inc.
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TYPE: PRT
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nes 19; Conserv
                                                          APPLICANT:
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                                                     TSUJIMOTO, Masafumi
   TSUROUOKA, Nobuo
NAKAZATO, Hiroshi
                                    IWASA, Fuyuki
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95.0%;
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                                                                                                                                                                                                                                                                           Score 90;
Pred. No.
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Pred. No.
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                                                                                                                                                                                                                                                                           DB 23;
9.3e-06;
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                                                                                                                                                                                                                      RESULT 13
US-10-110-030-2
                                                                                                                                                             Sequence 2, Application US, GENERAL INFORMATION:
APPLICANT: Miyata, Toshio
                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                     Matches
CURRENT APPLICATION NUMBER: US/10/110,030 CURRENT FILING DATE: 2002-04-03 PRIOR APPLICATION NUMBER: 11/285736 PRIOR EILING DATE: 1999-10-06 NUMBER OF SEQ ID NOS: 15 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                         TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL TITLE OF INVENTION: NEPHRITIS
                                                                                                          FILE REFERENCE: SHIM015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                             305 ADLSGIASGGRLYISRMMHK 324
                                                                                                                                                                                                                                                                                                                                                                   19;
                                                                                                                                                                                                                                                                                                                                 1 ADLSGIASGGRLYISRMMGK 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                 Application US/10110030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
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STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 380 amino acids
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                                                                                                                                                                                                                                                                                                                                                                   Conservative
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95.0%;
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Pred. No. 9
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9.3e-06;
                                                                                                                                                                                                                                                                                                                                                                                                   Length 380;
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TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DPIPCT
CURRENT APPLICATION NUMBER: US/09/936,883A
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: JP 1999-75305
PRIOR FILING DATE: 1999-03-19
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP 1999-306623
PRIOR APPLICATION NUMBER: JP 1999-306623
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 21
LENGTH: 368
TYPE: PRT
ORGANISM: Mus musculus
US-09-936-883A-21
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-09-936-883A-21
; Sequence 21, Application US/09936883A
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/09508997A
GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-09-22
UNMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 6
SEQ ID NO 6
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; TYPE: PRT
; ORGANISM: Mus musculus
US-09-508-997A-6
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US-09-508-997A-6
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; LENGTH: 380
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-110-030-2
                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 84.7%;
Best Local Similarity 80.0%;
Matches 16; Conservative
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Best Local Similarity 95.0
Matches 19; Conservative
                                                                      Match 84.7%; Score 83; DB 23; Local Similarity 80.0%; Pred. No. 0.00013; les 16; Conservative 3; Mismatches 1
91.8%;
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Pred. No. 0.00013;
3; Mismatches 1
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Pred. No. 9.3e-06;
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                                                                                                       DB 23; Length 368;
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                                                                      Indels
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                                                                    0;
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Search completed: July 11, 2003, 12:27:34 Job time: 63.9522 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0 Maximum DB seq length: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Perfect score:
Pending_Patents_AA_New:*

1: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep1:*

2: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep4:*

3: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep1:*

4: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep4:*

5: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*

6: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep1:*

6: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep1:*

7: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*

9: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep4:*

9: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

10: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

11: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

12: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

13: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*

14: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep4:*
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98
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    July 11, 2003, 11:55:27; Search time 18.7942 Seconds (without alignments) 280.699 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1229476 seqs, 263775074 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ADLSGIASGGRLYISRMMGK 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1229476
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	Query Match Length		DB	ID	Description
1	90	91.8	380	10	US-09-936-883C-2	Sequence 2, Appli
N	90	91.8	380	12	US-10-126-052A-263	263
ω	90	91.8	380	14	US-60-443-566-3006	Sequence 3006, Ap
4	90	91.8	380	14	US-60-455-444-4692	4692,
J.	90		380	14	US-60-465-241-4692	
σ	83	84.7	368	10	US-09-936-883C-21	
7	83	84.7	380	10	US-09-936-883C-19	19,
80	51	52.0	233	12	US-10-425-114-57272	Sequence 57272, A
9	51		233	12	US-10-425-114-68267	Sequence 68267, A
10	51		306	12	US-10-425-114-59731	Sequence 59731, A
11	51		306	12	US-10-425-114-59936	Sequence 59936, A
12	47		394	12	US-10-258-951-59	Sequence 59, Appl
13	47		405	N	PCT-US02-38526-416	Sequence 416, App
14	47	48.0	405	14	US-60-443-566-4407	Sequence 4407, Ap
. 15	47		405	14	US-60-455-444-7462	•
16	47	48.0	405	14	US-60-465-241-7462	-
17	47		425	N	PCT-US02-38526-408	Sequence 408, App
18	47		425	N	PCT-US02-07215B-2	Sequence 2, Appli
19	47	48.0	425	12	US-10-419-277-2	Sequence 2, Appli

45	44	43	42	41	40	39	38	37	36	35 5	34	33	32	31	30	29	28	27	26	25	24	23	22	21
45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	46	46	46	47	47	47
45.9	45.9	45.9				45.9																	8	48.0
406	406	406	406	406	406	406	406	406	238	238	238	238	238	238	238	238	238	238	377	257	257	617	425	425
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	12	12	N	N	14	14
US-09-724-676A-67574	US-09-724-676A-67573	US-09-724-676A-67565	US-09-724-676A-67564	US-09-724-676-67575	24	US-09-724-676-67573	US-09-724-676-67565	US-09-724-676-67564	US-09-724-676A-67571	US-09-724-676A-67570	US-09-724-676A-67569	US-09-724-676A-67568	US-09-724-676A-67567	US-09-724-676-67571	US-09-724-676-67570	US-09-724-676-67569	US-09-724-676-67568	US-09-724-676-67567	US-10-144-779-358	US-10-320-797-3054	PCT-US02-40225-3054	PCT-US02-38526-415	US-60-465-241-7461	US-60-455-444-7461
Sequence 67574, A	Sequence 67573, A	Sequence 67565, A	Sequence 67564, A	Sequence 67575, A	•	Sequence 67573, A	Sequence 67565, A	Sequence 67564, A	Sequence 67571, A	Sequence 67570, A	Sequence 67569, A	Sequence 67568, A	Sequence 67567, A	Sequence 67571, A	Sequence 67570, A	Sequence 67569, A	Sequence 67568, A	Sequence 67567, A	Sequence 358, App	Sequence 3054, Ap	Sequence 3054, Ap	Sequence 415, App	Sequence 7461, Ap	Sequence 7461, Ap

ALIGNMENTS

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PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 380
TYPE: PRT
ORGANISM: Homo sapiens
               RESULT 2
US-10-126-052A-263
US-10-126-052A-263
Sequence 263, Application US/10126052A
GENERAL INFORMATION:
APPLICANT: Aziz, Natasha
APPLICANT: Murray, Richard
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and
TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer
FILE REFERENCE: 018501-001530US
                                                                                                                                                                                                                                                                                  g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US, GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DFIPCT CURRENT APPLICATION NUMBER: US/09/936,883C CURRENT FILING DATE: 2001-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-03-19 PRIOR APPLICATION NUMBER: JP
                                                                                                                                                                                                                                                                                  305 ADLSGIASGGRLYISRMMHK 324
APPLICATION NUMBER: US/10/126,052A
                                                                                                                                                                                                                                                                                                 1 ADLSGIASGGRLYISRMMGK 20
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1.3e-06;
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CURRENT FILING DATE:

2002-04-18

APPLICATION NUMBER:

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US-60-455-444-4692
Sequence 4692, Application US/60455444
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LENGTH: 380
; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-443-566-3006
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR FILING DATE: 2001-05-10
PRIOR PPLICATION NUMBER: US 60/339,245
PRIOR FILING DATE: 2001-11-09
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/60/443;566
CURRENT FILING DATE: 2003-01-30
NUMBER OF SEQ ID NOS: 25102
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3006, Application US/60443566 GENERAL INFORMATION:
SEQ ID NO 4692
LENGTH: 380
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                                                                        CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
                                                                                                        APPLICANT: BEGOVICH, AND TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETIFILE REFERENCE: CL001455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001447
                                  SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: CARGILL, Michele APPLICANT: BEGOVICH, Ann
                                                     NUMBER OF SEQ ID NOS: 50986
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/372,246 PRIOR FILING DATE: 2002-04-12
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19; Conserv
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19; Conserv
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95.0%;
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4-18
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0; Mismatches
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1.3e-06;
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1.3e-06;
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RESULT

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US-09-936-883C-21
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US-09-936-883C-21
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Thes 19; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens US-60-465-241-4692
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                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21, Application US/09936883C GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
                                                                                                                                                                                           SEQ ID NO 21
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SEQ ID NO 4692
LENGTH: 380
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Best Local S
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                    FILE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: JP 1999-75305
PRIOR FILING DATE: 1999-03-19
                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001468
                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: A Method for Detecting Megsin Protein and TITLE OF INVENTION: Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
                                                                                                                                                                                                       SOFTWARE:
                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                           LENGTH: 368
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293 ADLSGIASGGRLYVSKLMHK 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              305 ADLSGIASGGRLYISRMMHK 324
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                            1 ADLSGIASGGRLYISRMMGK 20
                                                             . Similarity
16; Conserv
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Pred. No. 1.3e
0; Mismatches
                                                           Score 83; DB 10;
Pred. No. 1.9e-05;
3; Mismatches 1;
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Pred. No. 1.3e-06;
                                                                                                                                                                                                                                                       1999-306623
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                                                                                           Length 368;
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SEQ ID NO 57272
LENGTH: 233
TYPE: PRT
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Cao, Yongwel
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: A Method for Detecting Megsin Protein and TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DP1PCT
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LOCATION: 51, 94
OTHER INFORMATION: Xaa is unknown.
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TYPE: PRT
ORGANISM: Rattus norvegicus
                                                                                                                                                                                                                                                                                                 ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                       FEATURE:
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                                                                                                                                                                                           Similarity 64.
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Screen, Steven E
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                                                   Application US/10425114
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Pred. No. 2.9;
2; Mismatches
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Pred. No. 2e-05;
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SEQ ID NO 59731
LENGTH: 306
TYPE: PRT
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SEQ ID NO 68267
LENGTH: 233
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Best Local Similarity
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Best Local
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TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
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APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT EPPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwel
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
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TYPE: PRT
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27 AGLSGIESGTKLYISNL 43
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Kovalic, David K.
Screen, Steven E
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Screen, Steven E
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Screen, Steven E
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Pred. No.
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Pred. No. 2
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                                                                                                                         PCT-US02-38526-416
                                                                                                                                         RESULT 13
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Best Local Similarity 64...
11; Conservative
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Best Local :
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CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 59936
LENGTH: 306
TYPE: PRT
ORGANISM: Zea mays
FEATURE:
                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2002-10-28
PRIOR APPLICATION NUMBER: PCT/US01/13360
PRIOR FILING DATE: 2001-04-26
PRIOR APPLICATION NUMBER: 60/199,963
PRIOR APPLICATION NUMBER: 60/199,963
PRIOR FILING DATE: 2000-04-27
DEFINE APPLICATION NUMBER: 60/199,963
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TITLE OF INVENTION: NOVEL COMPOUNDS
FILE REFERENCE: GP50025
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FILING DATE: 2000-05-11
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9; Conserv
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                Wang, Zhiwei
Zhao, Qing
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Smith, Randall F.
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Xu, Chongjun
                                              Wang, Jian-Rui
                                                            Tang, Y. Tom
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64.7%;
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Pred. No.
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26;
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Best Local Similarity
""" 9; Conserve
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                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/60/443,566
CURRENT FILING DATE: 2003-01-30
NUMBER OF SEQ ID NOS: 25102
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4407
LENGTH: 405
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Remaining Prior Application data removed
NUMBER OF SEQ ID NOS: 653
SOFTWARE: PatentIn version 3.1
SEQ ID NO 416
                                                                        Matches
                                                                      Best Local Similarity Matches 9; Conserv
                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETIFILE REFERENCE: CL001447
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PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: PCT/US00/35017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 09/488,725 PRIOR FILING DATE: 2000-01-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: PCT/US02/38526 CURRENT FILING DATE: 2002-12-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2001-02-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 09/598,075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: PCT/US00/34263
PRIOR FILING DATE: 2000-12-26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: METHODS AND MATERIALS RELATING TO NOVEL POLYPEPTIDES AND POLYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 09/496,914 FILING DATE: 2000-02-03
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328
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Boyle, Bryan J.
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                                                                                            Pred. No.
                                                                                                            Score 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 47;
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                                                                        Mismatches
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27;
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RESULT 15

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US-60-455-444-7462

Sequence 7462, Application US/60455444

GENERAL INFORMATION:

APPLICANT: CARGILL, Michele
APPLICANT: BECOVICH, Ann

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CL001455

CURRENT FILING DATE: 2003-03-18

NUMBER OF SEQ ID NOS: 50986

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 7462

US-60-455-444-7462
Search completed: July 11, 2003, 12:35:10 Job time : 19.8942 secs
                                                                                                                                                                                                  Query Match 48.0%; Score 47; DB 14; Length 405; Best Local Similarity 45.0%; Pred. No. 27; Matches 9; Conservative 6; Mismatches 5; Indels
                                                                                                     1 ADLSGIASGGRLYISRMMGK 20
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328 ADLTGISPSPNLYLSKIIHK 347
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Minimum DB seq length: 0
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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Listing first 45 summaries
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    US-08-091-028-7

US-08-091-028A-7

5 US-09-140-719-7

4 US-10-091-442-7

7 US-60-196-718-3839

1 US-09-727-892-99
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Sequence 7, Appli
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Sequence 7, Appli
Sequence 3839, Ap
Sequence 99, Appl
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	-10-219-999-474	-803-	-09-739-449-8924	-09-791-537-11	-09-689-980-34	-09-513-996A-4656	-09-513-996A-29	-09-611-529-452	-09-270-849в-182	-09-270-767-57481	-09-540-209B-597	-60-167-217-876	S-60-140-956-158	T-US01-08631-5518	-09-675-784A-72	-60-360-039-1782	-09-791-537-1473	-08-827-356-291	-09-614-450-501	-09-614-450-5	-09-688-051-891	9-513-996A-	-09-688-051-89	9-513-996A-33	-10-015-127-97	-US00-07661-17	-US00-0766	-US00-07661-17	T-US00-07661-1	-09-791-537-713	-60-162-247-325	-163-123-1	-60-160-203-396	-09-540-209B-73	-36	S-09-758-471-366	S-60-163-062-871	-60-160-209-28	US-09-727-892A-99
,	equence 47475,	equence 8924	equence 8924,	uence 115423,	equence 341,	uence 46566,	e 29703,	equence 4520	equence 182166	equence 57481,	0	e 8763,	ce 1585,	55189, A	е 7	e 17822,	equence 147392	e 2912,	e 5013,	equence 50	e 891,	equence 33704	equence 892, Ap	e 33705,	e 9763, A	171	169,	17	169, 7	equence 71302	e 3259,	equence 1299,	equence 3968,	e 7383,	equence 3660,	equence 3660,	equenc	uence 2854,	equence 99

ALIGNMENTS

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RESULT 1
US-08-091-028-7
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GENERAL INFORMATION:
APPLICANT: TSUJIN
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SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/091,028
                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                       APPLICANT: YAMAGUCHI, NOZOMİ
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                           STREET: George Mason BloCITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08091028
                                                                                                                                                                                                                                                   E: Burns, Doane, Swecker & Mathis
George Mason Bldg., Washington & Prince Sts
                                                 PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                       KURIHARA, Tatsuya
YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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PRIOR APPLICATION DATA:

JP 4-212305

CLASSIFICATION:

14-JUL-1993

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEGISTRATION NUMBER: 36,113
REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
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APPLICATION NUMBER: JP 5
FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
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               ATTORNEY/AGENT INFORMATION:
                                                               PRIOR APPLICATION DATA:
                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                     NITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
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                                                                                                                                                                                                                                                                                                                          STREET: George Mu
CITY: Alexandria
                                                                               APPLICATION NUMBER: JP 4-FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: sir
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                               APPLICATION NUMBER: JP 5-067339 FILING DATE: 04-MAR-1993
                                                                                                                                   CLASSIFICATION:
                                                                                                                                                 APPLICATION NUMBER: US/08/091,028A FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                   MEDIUM TYPE:
                                                                                                                                                                                                                                                                                    COUNTRY: United States ZIP: 22313-1404
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                                                                                                                                                                                                                                                                                                                     Virginia
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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TERESA STANEK
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                            APPLICATION NUMBER: JP 4-FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                           REFERENCE/DOCKET NUMBER: OCTELECOMMUNICATION INFORMATION:
                                                                             FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: McGowan, Malcolm K.
                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 5 amino acids
                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
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TELECOMMUNICATION INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
             TELEPHONE:
                                                            REGISTRATION NUMBER: 39,300
                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                               APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
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                                                                           McGowan, Malcolm K.
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
(703) 836-2021
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             (703) 836-6620
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Pred. No. 4.2e+06;
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SEQUENCE CHARACTERISTICS:

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US-10-091-442-7
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                                                                                                        INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                         PRICATION NUMBER: US/10/091,442
FILICATION NUMBER: US/10/091,442
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATE: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US/09/140,719
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGGENT INFORMATION:
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TOPOLOGY: 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: United States

ZIP: 22313-1404

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane,
STREET: P.O. Box 1404
                                                                                                                                          REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 5 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
MOLECULE
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                              TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                               NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Alexandria
STATE: Virginia
                                                                                                                         TELEFAX: (703)
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IWASA, Fuyuki
TSUROUOKA, Nobuo
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Pred. No.
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; OTHER INFORMATION: Xaa •
US-60-196-718-3839
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                                                                                                                 ; ORGANISM: Staphylococcus aureus Bacteriophage 44 US-09-727-892-99
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                                                                                                                                                                                                                                                                                                                                                                              US-09-727-892-99
                                                                                                                                                      SEQ ID NO 99
LENGTH: 58
                                                                                                                                                                                                                                                                                                                                                Sequence 99, Applica GENERAL INFORMATION:
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SOFTWARE: FastSEQ fo
SEQ ID NO 3839
LENGTH: 41
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Best Local
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TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/727,892 CURRENT FILING DATE: 2000-12-01
                                                                                                                                                                                                                                              TITLE OF INVENTION: DNA SEQUENCES FROM STAPHYLOCOCCUS AUREUS BACTERIOPHAGE 44 AHJD TITLE OF INVENTION: THAT ENCODE ANTI-MICROBIAL POLYPEPTIDES FILE REFERENCE: 073406-0302
                                                                                                                                                                                                                                                                                                                 APPLICANT: Phagetech, Inc. APPLICANT: PELLETIER, Jer
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CURRENT FILING DATE: 2000-04-13
                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 159
SOFTWARE: PatentIn version
                                                                                                                                                                                                                                                                                        APPLICANT: GROS, Phillippe APPLICANT: DUBOW, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PEATURE: VARIANT
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Local Similarity 100.0%;
nes 5; Conservative (
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29 LYDAK 33
                           1 LYDAK 5
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Pred.
                                                                     Score 26; DB 21; Pred. No. 3.5e+02;
                                                       Mismatches
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Mismatches 0;
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RESULT 9
US-60-163-062-871
; Sequence 871, Application US/60163062
; GENERAL INFORMATION:
; APPLICANT: Bonazzi, Vivien
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : NUMBER OF SEQ ID NOS: 4646

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 2854

: LENGTH: 75

TYPE: PRT

: ORGANISM: HUMAN

US-60-160-209-2854
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US-60-160-209-2854
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US-09-727-892A-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2854, Application US/60160209
GENERAL INFORMATION:
APPLICANT: BONAZZI, VIVIEN
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LENGTH: 58
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APPLICANT: GROS, PHILLIPPE
APPLICANT: DUBOW, MICHAEL
APPLICANT: DUBOW, MICHAEL
TITLE OF INVENTION: DNA SEQUENCES FROM STAPHYLOCOCCUS AUREUS
TITLE OF INVENTION: THAT ENCODE ANTI-MICROBIAL POLYPEPTIDES
FILE REFERENCE: 073406/0302
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 05/168,777
PRIOR APPLICATION NUMBER: 60/168,777
PRIOR APPLICATION NUMBER: 60/168,777
PRIOR FILING DATE: 1999-12-01
                   CURRENT APPLICATION NUMBER: US/60/163,062
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 1302
                                                                            TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTIENS AND USES TITLE OF INVENTION: THEREOF FILE REFERENCE: CL000134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/60/160,209 CURRENT FILING DATE: 1999-10-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTIENS AND USES TITLE OF INVENTION: THEREOF FILE REFERENCE: CL000113
SOFTWARE:
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les 5; Conserv
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FastSEQ for Windows Version 4.0
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Pred. No.
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Pred. No. 3.5
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; ORGANISM: Human
US-60-163-062-871
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US-09-758-471-3660
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                                                                                                                                       PRIOR APPLICATION NUMBER: 60/180,628
PRIOR FILING DATE: 2000-02-04
NUMBER OF SEQ ID NOS: 5386
SOFTWARE: PATENTIN VEr. 2.0
SEQ ID NO 3660
LENGTH: 76
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GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PHOO2
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Best Local Similarity luv.
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SEQ ID NO 3660
LENGTH: 76
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Best Local Similarity
Matches 5; Conser
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LENGTH: 75
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CURRENT FILING DATE: 2001-01-11
PRIOR APPLICATION NUMBER: 60/179,065
PRIOR FILING DATE: 2000-01-31
                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/758,471
PRIOR FILING DATE: 2001-01-1
PRIOR APPLICATION NUMBER: 69/179,065
PRIOR FILING DATE: 2000-01-31
                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/235,953 CURRENT FILING DATE: 2002-09-12
                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Nucleic Acids, Proteins, FILE REFERENCE: PH002ClN
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Rosen et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/180,628
PRIOR FILING DATE: 2000-02-04
NUMBER OF SEQ ID NOS: 5386
                                                                                                           ORGANISM:
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   1 LYDAK 5
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                              ilarity 100.0%;
Conservative 0
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                              Score 26; DB 26;
Pred. No. 4.6e+02;
Mismatches 0;
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Pred. No. 4.6e+02;
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Sequence 3968, Application US/60160203

GENERAL INFORMATION:
APPLICANT: BONAZZI, VIVIEN

TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CLO00116
CURRENT APPLICATION NUMBER: US/60/160,203
CURRENT FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 6374
SOFTWARE: FASTSEQ FOR WINDOWS Version 4.0
SEQ ID NO 3968
LENGTH: 99
TYPE: PAT
ORGANISM: HUMAN
US-60-160-203-3968
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US-09-540-209B-7383
; Sequence 7383, Application US/09540209B
; GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLECIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTEROIDES FRA
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.1001-001
; CURRENT APPLICATION NUMBER: US/09/540,209B
; CURRENT FILING DATE: 2000-04-04
; NUMBER OF SEQ ID NOS: 10444
; SEQ ID NO 7383
; SEQ ID NO 7383
; SEQ ID NO 7383
US-09-540-209B-7383
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Best Local Similarity
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APPLICANT: Bonazzi, Vivien
APPLICANT: Bonazzi, Vivien
TITLE OF INVENTION: USCLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CL000137
CURRENT APPLICATION NUMBER: US/60/163,123
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEO ID NOS: 1986
SOFTWARE: FastSEQ for Windows Version 4.0
SEO ID NO 1999
LENGTH: 99
                                                                                                                                                                                                         Sequence 1299, Application US/60163123 GENERAL INFORMATION:
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Best Local
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Pred. No. 6.1e+02;
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Pred. No. 5e+02;
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RESULT 15
US-60-162-247-3259
; Sequence 3259, A
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; ORGANISM: Human
US-60-163-123-1299
Search completed: July 11, Job time: 17.738 secs
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                                                                                                                                                                             ; ORGANISM: Human
US-60-162-247-3259
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                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/60/162,247
CURRENT FILING DATE: 1999-10-29
NUMBER OF SEQ ID NOS: 5442
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3259
                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: BONAZZI, VIVIEN
APPLICANT: BONAZZI, VIVIEN
TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS AND
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CLOONIZ7
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Best Local Similarity
Matches 5; Conserv
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TYPE: PRT
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Pred. No. 6.1e+02;
); Mismatches 0;
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Pred. No. 7e+02;
; Mismatches
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Fri Jul 11 15:11:21
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Title:
Perfect score:
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Maximum DB seq length: 2000000000
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Maximum Match 100%
Listing first 45 summaries
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                   Pending_Patents_AA_New:*

1: /cgn2_6/ptcdata/1/paa/PCT_NEW_COMB.pep:*

2: /cgn2_6/ptcdata/1/paa/PCT_NEW_COMB.pep:*

3: /cgn2_6/ptcdata/1/paa/US06_NEW_COMB.pep:*

4: /cgn2_6/ptcdata/1/paa/US06_NEW_COMB.pep:*

5: /cgn2_6/ptcdata/1/paa/US07_NEW_COMB.pep:*

6: /cgn2_6/ptcdata/1/paa/US07_NEW_COMB.pep:*

7: /cgn2_6/ptcdata/1/paa/US08_NEW_COMB.pep:*

8: /cgn2_6/ptcdata/1/paa/US08_NEW_COMB.pep:*

9: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*

9: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*

10: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*

11: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*

12: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*

13: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*

13: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*

13: /cgn2_6/ptcdata/1/paa/US09_NEW_COMB.pep4:*
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26
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Copyright (c) 1993 - 2003 Compugen Ltd.
/cgn2_6/ptodata/.1/paa/US60_NEW_COMB.pep4:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

110 110 110 110 110 110 110 110 110 110	2 1	Result
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	26 26	Score
	100.0	Query Match
213 227 257 257 265 291 313 333 345 345 380 380 380	209	Length
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US-10-437-963-115384 US-09-950-084-4520 US-10-282-122A-0526 US-10-282-122A-0526 US-10-424-599-219617 US-10-437-963-144912 US-10-437-963-144912 US-10-454-437-98 US-09-724-676A-56008 US-09-724-676A-56008 US-09-724-676A-56008 US-09-724-676A-56008 US-09-724-676A-56008 US-09-724-676A-56008 US-09-724-676A-56008 US-10-366-683-21042 US-10-366-683-21042 US-10-366-683-2063 US-60-445-444-4692 US-0455-241-4692 US-60-465-241-4692	US-10-369-493-17822 US-09-675-784A-7278	ID
11538 4520, 60526 219625 21962 21949 55804 56008 56008 56008 21042 2042 2	Sequence 17822, A	Description

26 100.0 415 10 US-09-134-000C-3595 26 100.0 415 12 US-10-434-653-3595 26 100.0 427 12 US-10-434-660 26 100.0 454 12 US-10-156-761-14800 26 100.0 458 12 US-10-156-761-1632 26 100.0 489 2 PCT-USO2-38445-42 26 100.0 496 12 US-10-47-086-9542 26 100.0 496 12 US-10-702-012-771 26 100.0 516 12 US-10-702-012-772 26 100.0 521 12 US-10-702-012-769 26 100.0 521 12 US-10-702-012-769 26 100.0 524 12 US-10-369-493-2096 26 100.0 529 12 US-10-369-493-2096 26 100.0 529 12 US-10-369-493-10997 26 100.0 529 12 US-10-369-493-10997 26 100.0 559 12 US-10-369-493-10997 26 100.0 574 12 US-10-369-493-10997 26 100.0 588 12 US-10-369-493-10986 26 100.0 588 12 US-10-36-683-24185 26 100.0 588 12 US-10-36-683-24185 26 100.0 597 12 US-10-425-114-58457 26 100.0 625 12 US-10-425-114-58457 26 100.0 677 12 US-10-365-761-77899 26 100.0 707 12 US-10-156-761-7899	100.0 415 10 100.0 427 12 100.0 427 12 100.0 454 12 100.0 458 12 100.0 458 12 100.0 496 12 100.0 524 12 100.0 529 12 100.0 559 12 100.0 557 12 100.0 587 12 100.0 587 12 100.0 588 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12 100.0 598 12	45	. 44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21
.0 415 10 427 12 .0 428 12 .0 458 12 .0 459 12 .0 496 12 .0 516 12 .0 524 12 .0 529 12	.0 415 10 US-09-134-000C-3595 Sequence 415 12 US-10-434-665-3595 Sequence 20 427 12 US-10-454-437-96 Sequence 20 430 12 US-10-156-761-14800 Sequence 20 458 12 US-10-316-1660 Sequence 20 458 12 US-10-417-866-9542 Sequence 21 US-10-417-866-9542 Sequence 21 US-10-417-866-9542 Sequence 22 US-10-072-012-771 Sequence 23 US-10-072-012-769 Sequence 24 US-10-072-012-769 Sequence 25 US-10-072-012-769 Sequence 25 US-10-072-012-769 Sequence 25 US-10-072-012-769 Sequence 25 US-10-369-493-109810 Sequence 25 US-10-369-493-109810 Sequence 25 US-10-369-493-109810 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-493-10981 Sequence 25 US-10-369-683-24185 Sequence 25 US-10-369-114-58457 Sequence 25 US-10-425-114-58457 Sequence 25 US-10-156-761-7899 Sequence 25 US-10-156-761-7899 Sequence 25 US-10-156-761-7899 Sequence 25 US-10-156-761-150-26 Sequence 25 US-10-156-761-7899 Sequence 25 US-10-156-761-150-150-150-150-150-150-150-150-150-15	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
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US-09-134-000C-3595 US-10-444-665-3595 US-10-454-437-96 US-10-156-761-14800 US-10-316-203-11632 PCT-US02-38445-42 US-10-417-886-9542 US-10-47-963-190810 US-10-47-963-190810 US-10-437-963-190810 US-10-431-652-6406 US-10-431-652-6406 US-10-431-652-6406 US-10-431-652-781 US-10-369-493-29966 US-10-48-19-88-24185 US-10-48-128-62084 US-10-48-128-62084 US-10-482-114-58457 US-10-182-761-7891 US-10-182-761-78920 US-10-182-114-58457 US-10-182-114-58457 US-10-182-114-58457 US-10-182-114-58457 US-10-182-761-7899	595 Sequence 95 Sequence 800 Sequence 800 Sequence 96 Sequence 1 Sequence 1 Sequence 1 Sequence 1 Sequence 9 Sequence 106 Sequence 107 Sequence 108 Sequence	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	N	12	12	12	12	12	10
	Sequence 3: Sequence 9: Sequence 1: Sequence 1: Sequence 1: Sequence 2: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 7: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1: Sequence 1:	US-10-156-761-15026	-10-	82	US-10-425-114-58457	-282	US-10-419-128-24185	US-10-366-683-24185		US-10-369-493-23086	US-10-156-761-7781	US-10-431-652-5252	US-10-369-493-10997	US-10-431-652-6406	US-10-369-493-20966	US-10-072-012-769	US-10-437-963-190810	US-10-072-012-771	US-10-417-886-9542	PCT-US02-38445-42	US-10-446-203-11632	US-10-310-154-660	US-10-156-761-14800	US-10-454-437-96	-10-	-09-

ALIGNMENTS

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RESULT 2
US-09-675-784A-7278
US-09-675-784A-7278
; Sequence 7278, Application US/09675784A
; GENERAL INFORMATION:
; APPLICANT: HARE, ROBERTA S.
; APPLICANT: SHAW, KAREN J.
; APPLICANT: SHIMER JR., GEORGE H.
                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Thes 5; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT; ORGANISM: SPHINGOMONAS
US-10-369-493-17822
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US-10-369-493-17822
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PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 17822
LENGTH: 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17822, Application US/10369493 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
FILE REFERENCE: 38-10(52052)8
CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
CURRENT FILING DATE: 2003-02-28
                           APPLICANT:
                                                                                                                                                                                                                                                       128 LYDAK 132
                                                                                                                                                                                                                                                                                                1 LYDAK 5
KESSLER, MARCO
NOLLING, JORK
ZENG, QIANDONG
                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                          Score 26; DB 12;
Pred. No. 2.5e+02;
                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                             Length 209;
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Best Local Similarity
""" onserve
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; SEQ ID NO 7278
; LENGTH: 211
; TYPE: PRT
; ORGANISM: Aspergillus fumigatus
US-09-675-784A-7278
                                                                                                                                                                                                               RESULT 4
US-09-950-084-4520
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                                                                                                                                                                                             Sequence 4520, Application US/09950084
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LENGTH: 213
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APPLICANT:
                                                                  APPLICANT: George H. Miller
APPLICANT: Roberta S. Hare
APPLICANT: Karen J. Shaw
TITLE OF INVENTION: Staphylococcus aureus Related Compositions
FILE REFERENCE: 1034/1C963US2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
CURRENT APPLICATION NUMBER: US/09/950,084
CURRENT FILING DATE: 2001-09-10
PRIOR APPLICATION NUMBER: US 09/417,811
PRIOR FILING DATE: 1999-10-14
                                                                                                                                       APPLICANT: George H. Shimer, Jr. APPLICANT: George H. Miller
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: La Rosa, Thomas J. APPLICANT: Kovalic, David K. APPLICANT: Zhou, Yihua
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TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC ACIDS AND POLYPEPTIDES,
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 2976-4020US1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 204966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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                                                                                                                                                                                                                                                                                   67 LYDAK 71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barbazuk, Brad
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                                                                                                                                                                                                                                                                                                                                                         Conservative
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Pred.
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Pred. No.
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US-10-282-122A-60526; Sequence 60526, App
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Best Local
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NUMBER OF SEQ ID NOS: 7451
SEQ ID NO 4520
LENGTH: 227
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                                                                                                                                                                                                                             FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION UNMBER: US/10/282,122A
CURRENT FILLING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR TILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR APPLICATION UNMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-23
                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 09/037,934 PRIOR FILING DATE: 1998-03-10
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                                                                                                                                                                                                                                                                                                                                                        ITLE OF INVENTION: Identification of Essential Genes
                                                                                                    FILING DATE: 2000-09 APPLICATION NUMBER:
                                                                    APPLICATION NUMBER: 60/253,625
                                                                                                                                         APPLICATION NUMBER: 60/230,347
                                                                                                                                                              FILING DATE:
                  FILING DATE:
                                                                                     FILING DATE: 2000-10-23
                                   APPLICATION NUMBER: 60/257,931
                                                    FILING DATE:
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Zyskind, Jud
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Malone, Cheryl
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                                                                                                                                                                                                                                                                                                                                                                                                            Yamamoto, Robert
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60/267,636
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Pred. No.
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PRIOR APPLICATION NUMBER: 60/269,308 PRIOR FILING DATE: 2001-02-16

See File Wrapper or PALM

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APPLICANT: Kovalic David K
APPLICANT: Xovalic David K
APPLICANT: Con vihus
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT APPLICATION NUMBER: US/10/424,599
RUMBER OF SEQ ID NOS: 285684
SEQ ID NO 216617
LENGTH: 257
TYPE: PRT
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LENGTH: 253
                                                    SEQ ID NO 144912
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Best Local
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APPLICANT:
                                                                 CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
                                                                                                           APPLICANT: L1, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53221)B
                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                              APPLICANT: La Rosa, Thomas J. APPLICANT: Kovalic, David K.
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SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                            APPLICANT:
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ORGANISM: Oryza sativa
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                                    ENGTH:
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Barbazuk, Brad
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Pred. No.
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Pred. No. 3.1e+02;
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; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_45682C.1.pep
US-10-437-963-144912
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Best Local Similarity
Watches 5; Conservi
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SEQ ID NO 55804
LENGTH: 291
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TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
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APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, Dav
               PRIOR APPLICATION NUMBER: US 60/141031
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: DE 19931636.8
PRIOR FILING DATE: 1999-07-08
PRIOR APPLICATION NUMBER: DE 19932125.6
PRIOR FILING DATE: 1999-07-09
                                                                                                                               FILE REFERENCE: BGI-128CPCN
CURRENT APPLICATION NUMBER: US/10/454,437
CURRENT FILING DATE: 2003-06-13
                                                                                                                                                                                    APPLICANT: Pompejus, Markus
APPLICANT: Kroger, Burkhard
APPLICANT: Schroder, Hartwig
APPLICANT: Zelder, Oskar
APPLICANT: Zelder, Oskar
APPLICANT: Haberhauer, Gregor
TITLE OF INVENTION: INVOLVED IN HOMEOSTASIS AND ADAPTATION
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PRIOR APPLICATION NUMBER: DE 19932126.4
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NAME/KEY:
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OTHER INFORMATION: unsure at all Xaa locations
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Screen, Steven E
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Pred. No. 3.1e+02;
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DE 19932127.2

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; ORGANISM: Homo sapiens US-09-724-676A-56008
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US-10-454-437-98
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PRIOR FILING DATE: 1999-07-19
PRIOR APPLICATION NUMBER: DE 19932226.0
PRIOR FILING DATE: 1999-07-09
PRIOR APPLICATION NUMBER: DE 19932920.6
PRIOR FILING DATE: 1999-07-14
PRIOR FILING DATE: 1999-07-14
PRIOR FILING DATE: 1999-07-14
                                                                                  NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 56008
LENGTH: 333
TYPE: PRT
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                           Sequence 56008, Application US/09724676A GENERAL INFORMATION:
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SEQ ID NO 56008
LENGTH: 333
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Best Local :
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                                                                                                                                                                    APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative splicing FILE REPERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676A CURRENT FILING DATE: 200-11-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen
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CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 31
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Remaining Prior Application data.removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1999-07-09
APPLICATION NUMBER: DE 19932128.0
FILING DATE: 1999-07-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  246 LYDAK 250
                                                                                                                                                                                                                                                                                                                                                                   33 LYDAK 37
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 5; Conserv
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100.0%;
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Pred. No.
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Pred. No.
Score 26;
Pred. No.
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DB 10;
3.9e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 333;
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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Best Local S
Matches 5
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CURRENT FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: 09/252,991
PRIOR FILING DATE: 1999-02-18
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 21042
LENGTH: 345
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21042, Application US/10419128 GENERAL INFORMATION:
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                                                                    Matches
                                                                                    Query Match
Best Local
                                                                                                                                                                                                          SEQ ID NO 21042
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                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/419,128 CURRENT FILING DATE: 2003-04-21 PRIOR APPLICATION NUMBER: US/09/252,991 PRIOR FILING DATE: 1999-02-18 PRIOR PRIOR DATE: 1998-02-18 PRIOR FILING DATE: 1998-02-18
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS
FILE REFERENCE: 107196.136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Nolling, Jork
APPLICANT: Deloughery, Craig
APPLICANT: Bush, David
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: PATH03-04
                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/094,190 PRIOR FILING DATE: 1998-07-27
                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 33142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Rubenfield, Marc J.
                                                                                                                                                        ORGANISM:
                                                                                                                                                                                          LENGTH: 345
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331 LYDAK 335
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5; Conserv
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Pred. No. 4e+02;
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Pred.
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RESULT 14 US-09-936-883C-2 ; Sequence 2, Application US/09936883C

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APPLICANT: MAILS, Natasha
APPLICANT: MUTRAY, Richard
APPLICANT: Eos Blotechnology, Inc.
APPLICANT: Eos Blotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer
FILE REFERENCE: 018501-001530US
CURRENT APPLICATION NUMBER: US/10/126,052A
CURRENT FILING DATE: 2002-04-18
PRIOR APPLICATION NUMBER: US 60/284,770
PRIOR FILING DATE: 2001-04-18
PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: US 60/339,245
PRIOR APPLICATION NUMBER: US 60/339,245
PRIOR APPLICATION NUMBER: US 60/339,245
PRIOR APPLICATION NUMBER: US 60/339,345
PRIOR APPLICATION NUMBER: US 60/339,666
PRIOR APPLICATION NUMBER: US 60/330,666
PRIOR APPLICATION NUMBER: US 60/330,666
PRIOR FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: US 60/330,666
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2002-04-12
NUMBER OF SED ID NOS: 691
SOFTMARE: Patentin Ver. 2.1
SED ID NO 263
LENGTH: 380
TYPE: PRI
US-10-126-052A-263
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CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: JP 1999-75305
PRIOR FILING DATE: 1999-030-19
PRIOR FILING DATE: 1999-30-28
PRIOR APPLICATION NUMBER: JP 1999-306623
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 380
TYPE: PRT
ORGANISM: Homo sapiens
US-09-936-883C-2
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US-10-126-052A-263
Sequence 263, Application US/10126052A
GENERAL INFORMATION:
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Search completed: July 11, 2003, 12:35:11 Job time: 5.79854 secs
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APPLICANT: MIYATA, Toshio
                                                                                                                                                                                     Matches
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Local Similarity 100.0%;
nes 5; Conservativo
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les 5; Conserv
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100.0%; Pred. No. 4.4e+02;
vative 0; Mismatches 0;
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Pred. No.
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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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1: /cgn2_6/ptcdata/1/paa/VGS0_COMB.pep:*

2: /cgn2_6/ptcdata/1/paa/US01_COMB.pep:*

3: /cgn2_6/ptcdata/1/paa/US08_COMB.pep:*

4: /cgn2_6/ptcdata/1/paa/US081_COMB.pep:*

6: /cgn2_6/ptcdata/1/paa/US081_COMB.pep:*

6: /cgn2_6/ptcdata/1/paa/US082_COMB.pep:*

7: /cgn2_6/ptcdata/1/paa/US083_COMB.pep:*

9: /cgn2_6/ptcdata/1/paa/US085_COMB.pep:*

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27: /cgn2_6/ptcdata/1/paa/US093_COMB.pep:*
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Match
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                                                                                                                                                                                                                Length
   4 US-08-091-028-8

4 US-08-091-028A-8

15 US-09-140-719-8

15 US-10-091-442-8

17 US-60-160-203-4173

27 US-60-188-162-4539
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Sequence 8, Appli
Sequence 8, Appli
Sequence 8, Appli
Sequence 8, Appli
Sequence 4173, Ap
Sequence 4539, Ap
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Sequence 41, Appl Sequence 79163, A Sequence 132920, Sequence 37385, A Sequence 10543, A Sequence 37384, A Sequence 10542, A	US-09-509-234 US-09-791-537 US-09-791-537 US-09-513-9968 US-09-708-427 US-09-708-427 US-09-708-427 US-09-708-427		1000.	34 35 37 39 39 39 39
281, 22, 34, 34, 64, 190, 190, 190, 189, 189, 189,	-09 -10 -10 -10 -09 -09 -09	80 80 80 80 80 99 99 00 00 17 17	28 100.0 28 100.0 28 100.0 28 100.0 28 100.0 28 100.0 28 100.0 28 100.0 28 100.0	
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ALIGNMENTS

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APPLICATION NUMBER: US/08/091,028	CURRENT APPLICATION DATA:	 SOFTWARE: PatentIn Release #1.0, Version #1.25 	OPERATING SYSTEM: PC-DOS/MS-DOS	COMPUTER: IBM PC compatible	m	COMPUTER READABLE FORM:	ZIP: 22313-1404	COUNTRY: United States	STATE: Virginia	CITY: Alexandria	STREET: George Mason Bldg., Washington & Prince Sts.	ADDRESSEE: Burns, Doane, Swecker & Mathis	CORRESPONDENCE ADDRESS:	NUMBER OF SEQUENCES: 33	TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR	APPLICANT: YAMAGUCHI, Nozomi	APPLICANT: YAMAICHI, KOZO	APPLICANT: KURIHARA, Tatsuya	APPLICANT: ISHIDA, Nobuhiro	APPLICANT: MIURA, Kenju	APPLICANT: NAKAZATO, Hiroshi	APPLICANT: TSURUOKA, NObuo	APPLICANT: IWASA, Fuyuki	APPLICANT: TSUJIMOTO, Masafumi	GENERAL INFORMATION:	Sequence 8, Application US/08091028	RESULT 1 US-08-091-028-8

PRIOR APPLICATION DATA:
PRIOR APPLICATION NIMBER: JP 4-212305

14-JUL-1993

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US-08-091-028A-8
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                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/091,028A
FILING DATE: 14-JUL-1993
               ATTORNEY/AGENT INFORMATION:
                                                               PRIOR APPLICATION DATA:
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                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                    FITLE OF INVENTION:
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                                                                                 APPLICATION NUMBER: JP 4 FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                               STREET: George Ma
                                                                                                                                                                                                                                                                                      COUNTRY: United States ZIP: 22313-1404
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STRANDEDNESS: sir
TOPOLOGY: linear
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                                APPLICATION NUMBER: JP 5-067339 FILING DATE: 04-MAR-1993
                                                                                                                                   CLASSIFICATION:
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FILING DATE: 17-JUL-1992
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George Mason Bldg., Washington & Prince Sts
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YAMAICHI, KOZO
YAMAGUCHI, NOZOMi
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NAKAZATO, Hiroshi
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TERESA STANEK
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04-mAR-1993
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                                                                                               JP 4-212305
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Pred. No.
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Best Local Similarity
"atches 5; Conserve
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                                                      PRICE DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-2
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-0
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                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                            FILING DATE: 07-JUN-
PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: YAMAGUCHI, NOZOMI
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                           ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                         FILING DATE: 0 CLASSIFICATION:
NAME: McGowan, Malcolm K
REGISTRATION NUMBER: 39,
                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Alexandria
                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
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linear
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YAMAICHI, Kozo
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                                            04-MAR-1993
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08-AUG-1998
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                                                                                                      JP 4-212305
                                                                                                                                                 us 08/091,028
                                                                                                                                                                                                                                                                                 Release #1.0, Version #1.30
                                                          JP 6-067339
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Pred. No. 4.2e+06;
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TELEPHONE: (703) 836-6620

REFERENCE/DOCKET NUMBER:

001560-247

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                                                                                                        TELEFAX: (703) 8: INFORMATION FOR SEQ ID NO:
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LENGTH: 5 amino acids
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hes 5; Conserv
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STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
                                                                                                                                                         NAME: MCGOWAN, MAICOLM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                     SEQUENCE CHARACTERISTICS:
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MOLECULE
                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
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FILING DATE: 07-Mar-2002
CLASSIFICATION: CUNKNOWN>
R APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Alexandria
STATE: Virginia
                              TYPE: amino acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Burns, Doane, Swecker & Mathis
                                                                    LENGTH: 5 amino acids
                                                                                                                                            ELEPHONE:
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NAKAZATO, Hiroshi
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AMAGUCHI, NOZOMI
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Pred. No.
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4.2e+06;
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RESULT 7
US-09-621-976-5429
; Sequence 5429, Application US/09621976
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
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SOFTWARE: FastSEQ for
SEQ ID NO 4539
LENGTH: 118
; TYPE: PRT
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US-60-188-162-4539
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US-60-160-203-4173
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4173
LENGTH: 78
TYPE: PRT
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Best Local Similarity
Matches 5; Conser
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                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: ISOLATED HUMAN SECRETEL TITLE OF INVENTION: NUCLEIC ACID MOLECULES TITLE OF INVENTION: USES THEREOF FILE REFERENCE: CL000518
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TITLE OF INVENTION: ISOLATED HUMAN SECRETED
TITLE OF INVENTION: WUCLEIC ACID MOLECULES E
TITLE OF INVENTION: USES THEREOF
                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/60/188,162
CURRENT FILING DATE: 2000-05-09
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nes 5; Conserv
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Pred. No.
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Pred. No. 1.8e+02;
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Pred. No. 1.2e+02;
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4.2e+06;
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ENCODING HUMAN SECRETED PROTEINS
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US-09-328-352-6374
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US-60-147-499-5429
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US-09-621-976-5429
                   GENERAL INFORMATION:
APPLICANT: Gary L. Breton et al.
APPLICANT: Gary L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                        Sequence 6374, Application US/09328352
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SEQ ID NO 5429
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LENGTH: 126
FILE REFERENCE:
CURRENT APPLICA:
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NUMBER OF SEQ ID NOS: 19335
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TITLE OF INVENTION: ESTs and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
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NUMBER: US/09/328,352
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Pred. No. 2e+02;
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Pred. No.
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SEQ ID NO 445
FRANCTH: 163
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US-09-731-872-445
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US-09-328-352-6374
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Matches 5
                                    SOFTWARE: Patent.
SEQ ID NO 445
LENGTH: 163
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Best Local
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NUMBER OF SEQ ID NOS: 8252
SEQ ID NO 6374
LENGTH: 145
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TITLE OF INVENTION: FULL-LENGTH HUMAN CDNAS ENCODING POTENTIALLY SECRETED PROTEINS
FILE REFERENCE: 78 U.S4. CIP
CURRENT APPLICATION NUMBER: US/09/876,997
CURRENT FILING DATE: 2001-66-08
                                                                                                                                          PRIOR APPLICATION NUMBER: US 09/731,872
PRIOR FILLING DATE: 2000-12-07
PRIOR APPLICATION NUMBER: US 60/187,470
PRIOR FILLING DATE: 2000-03-06
                                                                                                          PRIOR APPLICATION NUMBER: US 60/169,629 PRIOR FILING DATE: 1999-12-08
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PRIOR APPLICATION NUMBER: US 60/187,470
PRIOR FILING DATE: 2000-03-06
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CURRENT FILING DATE: 2000-12-07
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APPLICANT: Jobert, Severin
TITLE OF INVENTION: FULL-LENGTH HUMAN CDNAS ENCODING POTENTIALLY SECRETED PROTEINS
FILE REFERENCE: 78.US3.REG
                                                                                           NUMBER OF SEQ ID NOS:
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                      TYPE: PRT
ORGANISM: Homo sapiens
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Pred. No. 2.6e+02;
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Pred. No.
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US-60-169-629-607
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                                                                                                      ; NAME/KEY: SIGNAL; LOCATION: -77..-1
US-60-187-470-607
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; LOCATION: -77..-1
US-60-169-629-607
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CURRENT FILING DATE: 1999-12-08
NUMBER OF SEO ID NOS: 715
SOFTWARE: PATENT.pm
SEO ID NO 607
LENGTH: 163
TYPE: PRT
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APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Bougueleret, L.
APPLICANT: Jobert, S.
TITLE OF INVENTION: cDNAS for Secreted Proteins
FILE REFERENCE: GENSET.071PRF
                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/60/187,470
CURRENT FILING DATE: 2000-03-06
NUMBER OF SEQ ID NOS: 715
SOFTWARE: Patent.pm
SEQ ID NO 607
LENCTH: 163
TYPE: PRT
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                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                         ENERAL INFORMATION
                                                                                                                                                           ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                      ITLE OF INVENTION: cDNAS for Secreted Proteins ILE REFERENCE: 78.US2.PRO
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                                                                                                                                                                                                                                                                                                                                                                                                                        159 NYEMK 163
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159 NYEMK 163
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                                                  Similarity 100 5; Conservative
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Pred. No.
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Pred. No.
                                                                Score 28;
Pred. No.
                                                    Mismatches
                                                    2.6e+02;
hes 0;
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2.6e+02;
                                                                              DB. 27;
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RESULT 14

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RESULT 15
US-09-252-691-7915
Sequence 7915, Application:
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Best Local Similarity
Thes 5; Conserv
                                                                                                                                                                                                     ; TYPE: PRT ; ORGANISM: Enterobacter cloacae US-09-252-691-7915
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Search completed: July 11, 2003, 12:27:38 Job time: 17.738 secs
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                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/252,691B
CURRENT FILING DATE: 1999-02-18
NUMBER OF SEQ ID NOS: 11324
SEQ ID NO 7915
LENGTH: 214
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SEQ ID NO 12333
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/675,784A CURRENT FILING DATE: 2000-09-29 PRIOR APPLICATION NUMBER: 60/156,338 PRIOR FILING DATE: 1999-09-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: ZENG, QIANDONG
APPLICANT: GREENE, JONATHAN R.
TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC ACIDS AND POLYPEPTIDES,
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 2976-4020US1
                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                        Keith G. Weinstock et al.
VENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROBACTE
VENTION: CLOACAE FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KESSLER, MARCO
NOLLING, JORK
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                                                                                                                                   Conservative
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Pred. No. 3.5e+02;
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Pred. No. 2.9e+02;
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                                                                                                                                                                 Length 214;
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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Perfect score:
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28
1 NYEMK 5
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/cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep::
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/cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep::
/cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep::
/cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep::
/cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep::
/cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep::
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

1 28 100.0 116 10 2 28 100.0 115 12 2 28 100.0 135 12 4 28 100.0 145 12 5 28 100.0 158 10 6 28 100.0 158 10 7 28 100.0 175 12 8 28 100.0 205 12 10 28 100.0 214 12 11 28 100.0 380 12 13 28 100.0 380 14
10 US-09-724-676-95964 10 US-09-724-676A-95964 11 US-10-424-599-265931 12 US-10-431-652-6374 10 US-09-724-676-95968 10 US-09-724-676-95968 10 US-09-675-784A-12333 11 US-09-675-784A-12333 12 US-10-424-599-265929 12 US-10-424-596-915 13 US-09-936-883C-2 14 US-60-443-5663
Sequence 95964, A Sequence 25931, Sequence 265931, Sequence 374, Ap Sequence 95968, A Sequence 95968, A Sequence 254001, Sequence 12333, A Sequence 265929, Sequence 7915, App Sequence 263, App Sequence 263, App Sequence 3006, App Sequence 4692, App

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
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Sequence 184199,	Sequence 186021,	Sequence 7436, Ap	•	Sequence 7444, Ap	7069,	Sequence 7069, Ap	Sequence 93759, A	Sequence 93759, A		Sequence 162592,	Sequence 93757, A	Sequence 93757, A	Sequence 232746,	Sequence 191002,	Sequence 234765,	3405	Sequence 35, Appl	Sequence 11, Appl	Sequence 8, Appli	Sequence 7, Appli	Sequence 6, Appli	Sequence 5, Appli	Sequence 3, Appli	Seguence 498, App	pequence rosos, A

ALIGNMENTS

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RESULT 1

US-09-724-676-95964
; Sequence 95964, Application US/09724676
; GENERAL INFORMATION:

APPLICANT: Compugen LTD
; TITLE OF INVENTION: Variants of alternative spl
; FILE REFERENCE: 129181.4 Compugen
; CURRENT APPLICATION NUMBER: US/09/724,676
; CURRENT APPLICATION NUMBER: US/09/724,676
; CURRENT FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 97222
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 95964
; LENGTH: 116
; TYPE: PRT
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US-09-724-676A-95964
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US-09-724-676-95964
; ORGANISM: Homo sapiens
US-09-724-676A-95964
                                                                        CURRENT APPLICATION NUMBER: ÛS/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 95964
SEQ ID NO 95964
                                                                                                                                                                       Sequence 95964, Application US/09724676A
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CIDERWISTON WITCH.
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Best Local
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                                      LENGTH: 116
TYPE: PRT
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Similarity 100.0%;
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Mismatches
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US-10-431-652-6374
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SEQ ID NO 6374
LENGTH: 145
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SEQ ID NO 265931
LENGTH: 135
TYPE: PRT
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Best Local
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TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5323)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
                                                                                                                                                                                                                            PRIOR FILING DATE: 1999-06-04
PRIOR APPLICATION NUMBER: US.60/088,701
PRIOR FILING DATE: 1998-06-09
                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/431,652 CURRENT FILING DATE: 2003-05-06
                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: PATH03-08
                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 09/328,352
PRIOR FILING DATE: 1999-06-04
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Breton, Gary L. APPLICANT: Bush, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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Pred. No.
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30;
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                                                                   NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 254001
LENGTH: 175
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SOFTWARE: PatentIn version
SEQ ID NO 95968
LENGTH: 158
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SEQ ID NO 95968
LENGTH: 158
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                                                                                                                       APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)8
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676 CURRENT FILING DATE: 2000-11-28
                                                                                                                                                                                                                                                                      APPLICANT: La Rosa Thomas
OTHER INFORMATION: Clone ID: PAT_MRT3847_71386C.1.pep
                                 ORGANISM: Glycine max
                                                      TYPE: PRT
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ORGANISM: Homo sapiens
                  FEATURE:
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Pred. No.
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TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC ACIDS AND POLYPEPTIDES,
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 2976-4020US1
CURRENT FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/156,338
PRIOR RILING DATE: 1999-09-29
NUMBER OF SEQ ID NOS: 13925
SEQ ID NO 12333
LENGTH: 181
TYPE: PRT
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SEQ ID NO 265929
LENGTH: 205
TYPE: PRT
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APPLICANT: Cao Yongwel
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(3323)8
CURRENT EPPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
                                                                                                                                                                                                                                                                                                                                    APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
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                                                                                                                             OTHER INFORMATION: Clone ID: PAT_MRT3847_82154C.1.pep
                                                                                                                                                          ORGANISM: Glycine max
                                                                                                                                                FEATURE:
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NOLLING, JORK
ZENG, QIANDONG
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Pred. No.
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RESULT 12
US-10-126-052A-263
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US-10-417-886-7915
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CURRENT FILING DATE: 2003-04-17
PRIOR APPLICATION NUMBER: US/99/252,691C
PRIOR FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/094,145
PRIOR FILING DATE: 1998-07-24
PRIOR APPLICATION NUMBER: US 60/074,787
PRIOR APPLICATION UNMER: US 60/074,787
PRIOR FILING DATE: 1998-02-18
                                                                                                Sequence 263, Application US/10126052A GENERAL INFORMATION:
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SEQ ID NO 7915
LENGTH: 214
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Best Local
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                                       APPLICANT: Aziz, Natasha
APPLICANT: Murray, Rich
APPLICANT: Eos Biotechn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROBACTER
TITLE OF INVENTION: CLOACIE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.135
APPLICANT: Murray, Richard
APPLICANT: Eos Bictechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions
TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cance
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-03-19
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TYPE: PRT
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Pred. No.
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Mismatches
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US-60-443-566-3006
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US-10-126-052A-263
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CURRENT FILING DATE: 2003-01-30
NUMBER OF SEQ ID NOS: 25102
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 3006
LENGTH: 380
TYPE: PRT
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
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LENGTH: 380
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PRIOR FILING DATE: 2001-11-09
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR EILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: US 60/372,246
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/284,770
PRIOR FILING DATE: 2001-04-18
PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR FILING DATE: 2001-05-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 018501-001530US
CURRENT APPLICATION NUMBER: US/10/126,052A
CURRENT FILING DATE: 2002-04-18
                                                                                                                                                                                                                                                                                              100.0%;
Local Similarity 100.0%;
es 5; Conservation
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Pred. No.
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Pred. No.
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                                                                                                                                                                                                                                                                                                       0;
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Search completed: July 11, Job time: 5.79854 secs

2003, 12:35:12

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CURRENT APPLICATION NUMBER: US/60/465,241
COURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 4692
LENGTH: 380
TYPE: PRT
ORGANISM: Homo sapiens
US-60-465-241-4692
                                     Query Match
Best Local Similarity
Watches 5; Conserve
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                      δÃ
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                                                                                                                                                                                                                                                                                                                               US-60-465-241-4692
                                                                                                                                                                                                                                                                                                                                              RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity luv.
"""" tohes 5; Conservative
                                                                                                                                                                                                                                                                                                   Sequence 4692, Application US/60465241 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 4692
LENGTH: 380
                                                                                                                                                                                                                                         APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHUMATOID ARTHRITIS, METHODS OF DETI
                                                                                                                                                                                                                               FILE REFERENCE: CL001468
284 NYEMK 288
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                        1 NYEMK 5
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                                                                Score 28;
Pred. No.
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Pred. No.
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                                                                             14;
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                                                                             Length 380;
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

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OM protein - protein search, using sw model

Run on: July 11, 2003, 11:54:32; Search time 31.4761 Seconds

(**Ithout alignments)

Perfect score: 50

Sequence: 1 Avanwhgerk 10

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 4569144 seqs, 644733110 residues

Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 200000000

Maximum Match 100*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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50	50	50	50	50	Score	
100.0	100.0	100.0	100.0	100.0	Query Match	9
380	380 380	380	10	10	Query Match Length DB ID	
21	15 19	4	24	15	ВВ	
US-09-791-537-281	5 US-09-140-719-34 1IS-09-508-997A-2	US-08-091-028A-34	US-10-091-442-9	US-09-140-719-9	DB ID	
Sequence 281, Ap	Sequence 34, Appl	Sequence 34, Appl	Sequence 9, Appl	Sequence 9, Appl	Description	

45	44	4	42	41	40	9	38	37	36	35 5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	œ	7
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21	21	21	27	27	27	27	27	16	_	26	16	_	27	27	22	22	16	25	19	13	27	21	21	21	21	19	Ľ	25	23	19	25	23	19	4	4	25	24	23
S-09-791-537-2800	US-09-791-537-85844	-09-791-537-44	60-142-845-609	-60-140-803-50	-60-178-	-60-177-646-288	-60-177-5	-09-252-9	-US01-08631-41682	-10-219-7	-09-209-41	-US98-12125	-60-197-873	-60-069-957-2	-09-856-231A-12	-09-834-366-	5-435-3	-10-155-881-	-09-547-599C-	-08-904-468-3	-60-243-468-	-09-708-427-	09-708-	-09-708-427-	-09-791-537-	09-540-209в-5	-US01-08631-4168	-10-110-030-6	-09-936-883A	-09-508-997A-	-10-110	-09-936-883	S-09-508	-091-028A	-08-091-	S-10-110-030-	.0-091-442-3	US-09-936-883A-2
Sequence 2	Sequence 8		O			equence	w	Sequence 3	4		œ	_	equence	equence		Ø	equence	equence :	equence :		equence	equence	equence	equence	Φ	Sequence 5	quence 41	equence	equence	Sequence 6	Sequence 4	equence 1	Sequence 4	9		Sequence 2	w	Sequence 2
28004, A	5	4885,	09, Ap	99	`	2881, Ap	•	30838, A	1682, A	•	0	•	985	,8	23, App		380, App	9011,	046,	28,	Þ		➣	-		860,	33	•	ب	•	•	9, Appl	, Appli	Appli	Appli		4, Ap	, Appli

ALIGNMENTS

S-09-140-719-9 Sequence 9, Application US/09140719 GENERAL INFORMATION: APPLICANT: TSUJIMOTO, Masafumi APPLICANT: TSUJIMOTO, Masafumi APPLICANT: TSUJIMOTO, Hiroshi APPLICANT: TIGROUGKA, NObuo APPLICANT: MAKAZATO, Hiroshi APPLICANT: MIURA, Kenju APPLICANT: KURHARA, Tatsuya APPLICANT: KURHARA, Tatsuya APPLICANT: YAMAGUCHI, NOZOM APPLICANT: YAMAGUCHI, NOZOM APPLICANT: YAMAGUCHI, NOZOM APPLICANT: YAMAGUCHI, NOZOM TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34 CORRESSEE: Burns, Doane, Swecker & Mathis STATES: P.O. Box 1404 CITY: Alexandria STATE: Yirginia COUNTRY: United States ZIP: 22313-1404 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC Compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOTWMARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION NUMBER: US/09/140,719

08-AUG-1998

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US-10-091-442-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 9, Application US/10091442 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 04-M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 07-JU
                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AVAMMHQERK 10
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Similarity 100.0%;
                           APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION: Unknown>
                                                                                                                                                                                                                   CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                     STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  McGowan, Malcolm K.
APPLICATION NUMBER: US/09/140,719
                                                                                                                                                                                                     COUNTRY: United States
                                                                                                                                                                                                                                                                   ADDRESSEE: Burns, Doane, Swecker & Mathis
                                                                                                                                                                                                                                                                                                       OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                     22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                   KURIHARA, Tatsuya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                       YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                       MIURA, Kenju
                                                                                                                                                                                                                                                                                                                                     YAMAGUCHI, Nozomi
                                                                                                                                                                                                                                                                                                                                                                                     ISHIDA, Nobuhiro
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NAKAZATO, Hiroshi
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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US-08-091-028A-34
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PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: JP 5-0'
APPLICATION NUMBER: 04-MR-1993
                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ' TELEFAX: (703) 8: INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                           CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                       APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
                                                                                                                                    CLASSIFICATION:
                                                                                                                                                    APPLICATION NUMBER: US/08/091,028A FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                               COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                      STREET: George M
CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Burns, Doane, Swecker & Mathis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: JP 6 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
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YAMAICHI, Kozo
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ISHIDA, Nobuhiro
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NAKAZATO, Hiroshi
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                                JP 5-067339
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REGISTRATION NUMBER:

REFERENCE/DOCKET NUMBER: 001560-204

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Best Local Similarity 100.0%;
Matches 10; Conservative (
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
CLASSIFICATION:
NAME: MCGOWAN, MAICOLM K.
REGISTATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                    APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
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CITY: Alexandria
STATE: Virginia
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APPLICATION NUMBER: US OFFILING DATE: 07-JUN-1995
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NAKAZATO, Hiroshi
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YAMAICHI, Kozo
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204 AVAMMHQERK 213

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; ORGANISM: Homo sapiens US-09-791-537-281
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LENGTH: 380
TYPE: PRT
                                                                                                                                                    SOFTWARE: PatentIn version 3.0 SEQ ID NO 281
                                                                                                                                                                                                                                                                                                                          Sequence 281, Application US/09791537 GENERAL INFORMATION:
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Best Local :
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                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
                                                                                                                                                                                                                                             APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-09-22
NUMBER OF SEQ ID NOS: 44
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                                                                                                                                                                                                                                                                                                            APPLICANT: Bionomix, Inc.
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                                                                                                                       LENGTH: 380
TYPE: PRT
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LENGTH: 380 amino acids
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                                             Local Similarity
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Local Similarity 100.0%;
es 10; Conservative (
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1 AVAMMHQERK 10
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Pred. No. 0.2
0; Mismatches
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Pred. No. 0.2
0; Mismatches
                                             Score 50; DB 21; Pred. No. 0.21;
                                Mismatches
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0.21;
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RESULT 8
US-10-091-442-34
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GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883A
CURRENT FILING DATE: 2001-12-21
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PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
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SOFTWARE: PatentIn Ver.
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TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                     ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
                                                                                                                                                                    PRIOR
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             APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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10; Conserv
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                                                                                                                                                                                                                                                                                                                                                                    CITY: Alexandria
STATE: Virginia
COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: P.O.
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YAMAICHI, Kozo
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JP 6-067339
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US-08-091-028-9
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-110-030-2
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                                                                                                                                                                                                           Sequence 9, Applicati
GENERAL INFORMATION:
APPLICANT: TSUJIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE:
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/10110030 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Miyata, Toshio
TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE
TITLE OF INVENTION: NEPHRITIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 11/285736
PRIOR FILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/110,030 CURRENT FILING DATE: 2002-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: SHIM015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 34:
                                                                                                                                              APPLICANT:
                              CORRESPONDENCE ADDRESS
                                              NUMBER OF SEQUENCES:
                                                                 TITLE OF INVENTION:
                                                                                APPLICANT:
                                                                                                APPLICANT:
                                                                                                               APPLICANT:
                                                                                                                              APPLICANT:
                                                                                                                                                                                                APPLICANT:
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   STREET:
                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 34:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: MGGOWAD, MAICOLM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                           204 AVAMMHQERK 213
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                                                                                                                                                                                                                                           Application US/08091028
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (703) 836-6620 TELEFAX: (703) 836-2021
E: Burns, Doane, Swecker & Mathis
George Mason Bldg., Washington & Prince Sts.
                               KURTHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, KOZO
YAMAGUCHI, NOZOMI
VENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
PEQUENCES: 33
                                                                                                                                            TSURUOKA, Nobuo
NAKAZATO, Hiroshi
MIURA, Kenju
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               Burns,
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Pred. No. 0.21;
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Pred. No. 0.21;
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MEDIUM TYPE: Floppy

Floppy disk

COUNTRY:

United States

Virginia

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; MOLECULE TYPE: peptide
US-08-091-028-9
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/091,028
FILING DATE: 14-JUL-1993
CLASSIFICATION: 435
CLASSIFICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                        APPLICANT: YAMAGUCHI, NOZOMİ
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                              ADDRESSEE: Burns, Doane, Swecker & Mathis STREET: George Mason Bldg., Washington & Prince Sts. CITY: Alexandria STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 10 amino acid
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                              STATE: Virginia COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 36,113
REFERENCE/DOCKET NUMBER: 001560-204
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APPLICATION NUMBER: US/08/091,028A FILING DATE: 14-JUL-1993
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Similarity 90.0%;
9; Conservative
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NAKAZATO, Hiroshi
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YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                   ISHIDA, Nobuhiro
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SYSTEM: PC-DOS/MS-DOS
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Pred. No. 0.048;
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Sequence 4, Application US/09508997A
GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
CURRENT FILING DATE: 2000-06-27
PRIOR ADDITORMAN
                                                                                                        RESULT 13
US-09-936-883A-19
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SEQ ID NO 4
LENGTH: 380
TYPE: PRT
ORGANISM: Rattus rattus
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Best Local S
Matches 9
Sequence 19, Application US/09936883A
GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A Method for Detecting Megsin Protein and
TITLE OF INVENTION: Thereof
TITLE REFERENCE: F2-101DP1PCT
CURRENT APPLICATION NUMBER: US/09/936,883A
                                                                                                                                                                                                                            Matches
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 44
                                                                                                                                                                                                                                                                                                     NAME/KEY: UNSURE
LOCATION: 51, 94
OTHER INFORMATION: Xaa is unknown.
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FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                         Local Similarity les 8; Conserv
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REGISTRATION NUMBER: 30,427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
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204 AVNMMHQERR 213
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9; Conserv
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                                                                                                                                                                                                                                                        Score 41;
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Pred. No. 0.048;
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16;
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2001-12-21

1999-75305

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Sequence 6, Application US/09508997A
GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-09-22
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                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Rattus norvegicus
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 51, 94
; OTHER INFORMATION: Xaa = Any Amino Acid
US-10-110-030-4
                                                                                                                                                                                                  RESULT 15
US-09-508-997A-6
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NAME/KEY: misc_feature
LOCATION: 51, 94
COTHER INFORMATION: Xaa is unknown.
US-09-936-883A-19
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US-10-110-030-4
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PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4 LENCTH: 380 TYPE: PRT
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APPLICANT: Miyata, Toshio
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Best Local
SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 6
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Best Local S
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SEQ ID NO 19
LENGTH: 380
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CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 11/285736
PRIOR FILING DATE: 1999-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE TITLE OF INVENTION: NEPHRITIS FILE REFERENCE: SHIM015
                               NUMBER OF SEQ ID NOS: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT ORGANISM: Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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204 AVNMMHQERR 213
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Pred. No. 16;
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; LENGTH: 368
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-508-997A-6
Search completed: July 11, 2003, 12:27:40 Job time: 33.4761 secs
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                                                 193 VNMMHQERR 201
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1: /cgn2_6/ptcodata/1/paa/PCT_NEW_COMB.pep4:*

2: /cgn2_6/ptcodata/1/paa/PCT_NEW_COMB.pep4:*

3: /cgn2_6/ptcodata/1/paa/US06_NEW_COMB.pep4:*

4: /cgn2_6/ptcodata/1/paa/US06_NEW_COMB.pep4:*

5: /cgn2_6/ptcodata/1/paa/US07_NEW_COMB.pep4:*

6: /cgn2_6/ptcodata/1/paa/US07_NEW_COMB.pep4:*

7: /cgn2_6/ptcodata/1/paa/US08_NEW_COMB.pep4:*

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10: /cgn2_6/ptcodata/1/paa/US09_NEW_COMB.pep4:*

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13: /cgn2_6/ptcodata/1/paa/US00_NEW_COMB.pep4:*

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US-09-936-883C-19

US-09-936-883C-21

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US-60-443-566-4429

US-60-443-566-4419

US-09-724-676-86949

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US-09-724-676-86949

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US-10-419-963-172615

US-10-419-128-30838

US-10-437-963-160324
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280.699 Million cell updates/sec
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Sequence 2, Appli
Sequence 263, App
Sequence 3006, App
Sequence 4692, Ap
Sequence 19, Appl
Sequence 11, Appl
Sequence 21, Appl
Sequence 4420, Ap
Sequence 4419, Ap
Sequence 86949, A
Sequence 86949, A
Sequence 5882, Ap
Sequence 5882, Ap
Sequence 172615,
Sequence 30838, A
Sequence 30838, A
Sequence 30838, A
Sequence 30838, A
Sequence 160324,
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76573,	•		•	۳,	6287	14,	Sequence 14, Appl	14,	19,	Sequence 38163, A	Sequence 210174,	154295	Sequence 2376, Ap		Sequence 12638, A	Sequence 63, Appl	Sequence 1352, Ap	Sequence 24115, A	Sequence 2207, Ap			17916,		Sequence 104627,	Sequence 411, App

ALIGNMENTS

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US-10-126-052A-263

Sequence 263, Application US/10126052A

Sequence 263, Application US/10126052A

GENERAL INFORMATION:
APPLICANT: Asiz, Natasha
APPLICANT: Murray, Asichard
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer; FILE REFERENCE: 018501-001530US
                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 380
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-936-883C-2
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US-09-936-883C-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-03-19 PRIOR APPLICATION NUMBER: JP PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21 SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: A method for Detecting Megsin
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DPLPCT
CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
CURRENT APPLICATION NUMBER: US/10/126,052A
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CURRENT FILING DATE: 2002-04-18
PRIOR APPLICATION NUMBER: US 60/284,770

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US-60-455-444-4692
, Sequence 4692, Application US/60455444
; GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
, APPLICANT: BEGOVICH, Ann
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US-60-443-566-3006
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PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: US 60/339,245
PRIOR FILING DATE: 2001-11-09
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR APPLICATION NUMBER: US 60/334,370
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LENGTH: 380
TYPE: PRT
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Matches
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3006
LENGTH: 380
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APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4692 LENGTH: 380
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                                                      CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
                                                                                                                     TITLE OF INVENTION: GENETIC POLYMORPHISMS TITLE OF INVENTION: RHEUMATOID ARTHRITIS, FILE REFERENCE: CL001455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF FILE REFERENCE: CL001447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/60/443,566 CURRENT FILING DATE: 2003-01-30
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1 AVAMMHQERK 10

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PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19
LENGTH: 380
TYPE: PRT
ORGANIEM: Rattus norvegicus
                                                                ; OTHER INFORMATION: Xaa is unknown. US-09-936-883C-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens US-60-465-241-4692
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US-60-465-241-4692
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                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-936-883C-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4692
LENGTH: 380
TYPE: PRT
 Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19, Application US/09936883C GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: REBUMATOID ARTHRITIS, METHODS OF DETI
FILE REFERENCE: CL001468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local :
                               Query Match
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                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/936,883C
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: JP 1999-75305
PRIOR FILING DATE: 1999-03-19
                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: A Method for Detecting Megsin Protein and TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DP1PCT
                                                                                             FEATURE:
NAME/KEY: misc_feature
LOCATION: 51, 94
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Local Similarity
mes 8; Conserv
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nes 10; Conserv
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204 AVAMMHQERK 213
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                82.0%;
 Score 41; DB
Pred. No. 6.9;
1; Mismatches
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Pred. No.
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Pred. No.
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                                 DB 10; Length 380;
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AVNMMHQERR 213

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RESULT 9
US-60-443-566-4420
; Sequence 4420, Application US/60443566
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
; APPLICANT: BEGOVICH, Ann
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US-09-864-408A-6424
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US-09-936-883C-21
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US-09-864-408A-6424
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LENGTH: 36
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APPLICANT: MIYATA, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
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SEQ ID NO 6424
LENGTH: 131
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               TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETILE REFERENCE: CL001447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/864,408A CURRENT FILING DATE: 2001-05-24 PRIOR APPLICATION NUMBER: 60/206,690 PRIOR FILING DATE: 2000-05-24
CURRENT APPLICATION NUMBER: US/60/443,566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 2:
SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/936,883C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: A Method for Detecting Megsin Protein and Use TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101Dp1PCT
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APPLICANT: Shinkets, Richard A.
TITLE OF INVENTION: Novel Human Polynucleotides and Polypeptides Encoded Thereby
FILE REFERENCE: 21402-012
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                                                                                                                                                                                                                                                                                        74.0%;
Local Similarity 77.8%;
nes 7; Conservation
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Local Similarity 88.9%;
les 8; Conservative
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Pred. No. 3.6;
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                                   METHODS OF DETECTION AND USES THEREOF
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; ORGANISM: Homo sapiens
US-60-443-566-4420
                                                                                                                                                                                                                                                                                                                                         RESULT 11
US-09-724-676-86949
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CURRENT FILING DATE: 2003-01-30
NUMBER OF SEQ ID NOS: 25102
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 4419
                                                                                                                                                                                                           Sequence 86949, Application US/09724676
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
                                                                                                                                                                 SOFTWARE: PatentIn version 3.2
SEQ ID NO 86949
LENGTH: 82
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APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
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NUMBER OF SED ID NOS: 25102
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4420
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Best Local Similarity 55,
Matches 5; Conservative
                                                                                        Query Match
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Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 69
TYPE: PRT
                                                                                                                                                       TYPE: PRT
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                             1 AVAMMHQER 9
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                                                          Similarity 55. 5; Conservative
 AIAVLHEER
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25102
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55.6%;
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55.6%;
                                                                        Score 34;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 34; DB
Pred. No. 28;
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Pred. No. 19;
                                                          ed. No. 33; Mismatches
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RESULT 12

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RESULT 13
US-60-443-566-4418
(Sequence 4418, Application US/60443566; GENERAL INFORMATION:
APPLICANT: CARGILL, Michele; APPLICANT: GEOVICH, Ann
APPLICANT: GEOVICH, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
US-10-219-051B-5879
Sequence 5879, Application US/10219051B
GENERAL INFORMATION:
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US-09-724-676A-86949
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LENGTH: 82
TYPE: PRT
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LENGTH: 82
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SEQ ID NO 5879
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                            PRIOR APPLICATION NUMBER: US 60/346,382
PRIOR FILING DATE: 2001-11-01
PRIOR APPLICATION NUMBER: US 60/333,347
PRIOR FILING DATE: 2001-11-26
NUMBER OF SEQ ID NOS: 14715
SOFTWARE: Perl script
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TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001447
                                                                                                                                                                                                                                                                                                                                            APPLICANT: The General Hospital Corporation doing business as Massachusetts General APPLICANT: Hospital / Bayer AG
APPLICANT: Hospital / Bayer AG
TITLE OF INVENTION: Nucleotide sequences involved in pain
FILE REFERENCE: LeA 35693 Foreign Countries
CURRENT APPLICATION NUMBER: US/10/219,051B
CURRENT FILING DATE: 2003-05-09
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CURRENT FILING DATE: 2003-01-30
                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/312,147 PRIOR FILING DATE: 2001-08-14
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SOFTWARE: FastSEQ for Windows Version 4.0
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SOFTWARE: PatentIn version 3.2
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les 5; Conservation
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18 AIAVLHEER 26
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18 AIAVLHEER 26
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Pred. No. 33;
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Search completed: July 11, 2003, 12:35:13 Job time: 10.4971 secs
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                                                                                                                                Best Local Similarity
Matches 5; Conserv
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SOFTWARE: Perl script
SEQ ID NO 5882
LENGTH: 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT FILING DATE: 2003-05-09
PRIOR APPLICATION NUMBER: US 60/312,147
PRIOR FILING DATE: 2001-08-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Nucleotide sequences involved in pain FILE REFERENCE: LeA 35693 Foreign Countries CURRENT APPLICATION NUMBER: US/10/219,051B
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                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: (1)..(83)
OTHER INFORMATION: Xaa=Unknown amino acid
                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
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18 AIAVLHEER
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AIAVLHEER
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Pred. No.
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Listing first 45 summaries
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Perfect score:
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length: 2000000000
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1 MASLAAANAEFCFN
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1: /cgn2_6/ptodata/l/paa/PCTUS_COMB.pep:*

2: /cgn2_6/ptodata/l/paa/US06_COMB.pep:*
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13 US-09-36-883A-2
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Sequence 34, Appl
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Sequence 2, Appli
Sequence 34, Appl
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Sequence 10, Appl	13,	equence 2, Appl	equence 106,	equence 106,	equence 12,	equence 65,	equence 30, App	equence	Sequence 121576,	equence	equence	w	N	e 2	_	O	Ø	e 2,	2, 1	e 83,	equence 12,	e 82,	ப	59,	equence 2, A _l	equence 946, Ap	equence 946,	equence 946,	equence 946, Ap	equence 946	uence 2,	e 6,	e 21,	equence 6,	equence 4,	equence 19,	quence 4, Ap	equence

ALIGNMENTS

RESULT 1

US-08-091-028A-34

Sequence 34, Application US/08091028A

GEMERAL INFORMATION:
APPLICANT: TSUJINOTO, Masafumi
APPLICANT: IWASA, FUYUKi
APPLICANT: IWASA, FUYUKi
APPLICANT: MIURA, KODUO
APPLICANT: MIURA, KEDJU
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMACHI, KOZO
APPLICANT: YAMACHI, NOZOMİ
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSEE: BURNS, DOANE, SWECKER & MATHİS
STREET: GEORGE MASON BİĞÇ,, WASHİNGTON & PRİNCE STATE:
ALEXANDRIA
COUNTRY: United States
ZIP: 2313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COUNTRY: DATALIN BATAS:
COURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/091,028A

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RESULT 2
US-09-140-719-34
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NAME: REA, TERESA STANEK
REGISTRATION NUMBER: 30,427
REFERENCE/DOCKET NUMBER: 0015
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                          Sequence 34, Applicat GENERAL INFORMATION:
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Best Local :
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APPLICANT:
                     APPLICANT: YAMAGUCHI, NOZOMI
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION
NUMBER OF SEQUENCES: 34
            CORRESPONDENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                           APPLICANT:
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TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 17-JUL-1992
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                                                                                                                                                                        Application US/09140719
                                                                                  MIURA, Kenju
ISHIDA, Nobuhiro
                                                         KURIHARA, Tatsuya
YAMAICHI, Kozo
                                                                                                          NAKAZATO, Hiroshi
                                                                                                                    TSUROUOKA, Nobuo
                                                                                                                                   IWASA, Fuyuki
                                                                                                                                              TSUJIMOTO, Masafumi
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           ADDRESS:
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Pred. No. 1.1e-179;
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; TOPOLOGY: linear; MOLECULE TYPE: protein US-09-140-719-34
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: MCGOWAN, MALCOLM K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 39,300
REFERENCE/FOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acids
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                     DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
                                                                                             LPENDLSEIENKLTFQNLMEWTNPRRWTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIF
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                                                                           LPENDLSETENKLTFQNLMEWTNPRRMTSKYYEVFFPQFKIEKNYEMKQYLRALGLKDIF
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 DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
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Pred. No. 1.1e-179;
; Mismatches 0;
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FLFVIRKDDIILFSGKVSCP

FLFVIRKDDIILFSGKVSCP

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240

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360

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Sequence 281, Application US/09791537

Sequence 281, Application US/09791537

GENERAL INFORMATION:
APPLICANT: Bionomix, Inc.
APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
ITITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261.7210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 281
LENGTH: 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09508997A
GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
CURRENT APPLICATION NUMBER: US/09/508,997A
CURRENT FILING DATE: 2000-06-27
PRIOR APPLICATION NUMBER: JP 09-275302
PRIOR FILING DATE: 1997-09-22
UNUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
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; TYPE: PRT
; ORGANISM: HOMO S
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                -09-791-537-281
                                   LENGTH: 38
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Similarity 100.0%; Pred. No. 1.1e-179;
80; Conservative 0; Mismatches 0;
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Matches 380;
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TYPE: PRT
ORGANISM: Homo s
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                                 Conservative
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Query Match
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                                                                                                               DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
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FLFVIRKDDIILFSGKVSCP 380
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Pred. No. 1.1e-179;
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Sequence 2, Application US/09936883A GENERAL INFORMATION:
APPLICANT: MIYATA, Toshio
CURRENT APPLICATION NUMBER: US/09/936,883A CURRENT FILING DATE: 2001-12-21 PRIOR APPLICATION NUMBER: JP 1999-75305 PRIOR FILING DATE: 1999-03-19 PRIOR APPLICATION NUMBER: JP 1999-306623 PRIOR FILING DATE: 1999-10-28 NUMBER OF SEQ ID NOS: 21 SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                   TITLE OF INVENTION: A Method for Detecting TITLE OF INVENTION: Thereof FILE REFERENCE: F2-101DP1PCT
                                                                                                                                                                                                                                                                              Megsin
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                                                                                                                                                                                                                                                                              Use
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0;

Mismatches

Indels

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Gaps

60

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Length

Score 1959; DB 23; Pred. No. 1.1e-179;

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TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID

US-10-091-442-34
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US-10-091-442-34
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GENERAL INFORMATION:
APPLICANT: TSUJ
                                                                                     INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: MEGANUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
                                                                                                                                             REFERENCE/DOCKET NUMBER: 001560-247 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002 CLASSIFICATION: <Unknown>
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                                                           TYPE:
                                                                                                                              TELEPHONE: (703)
                                                                                                                                                                          NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,3
                                                                                                                                                                                                                 APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: United States
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CITY: Alexandria
STATE: Virginia
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                                                                          LENGTH: 380 amino acids
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                                                           amino acid
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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US-10-110-030-2
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NUMBER OF SEQ ID NOS: 15
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 2
LENGTH: 380
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: SHIM015
CURRENT APPLICATION NUMBER: US/10/110,030
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 11/285736
PRIOR FILING DATE: 1999-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Miyata, Toshio
TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL PROLIFERATIVE
TITLE OF INVENTION: NEPHRITIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 LPENDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIF
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WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGGINMYVL
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Pred. No. 1.1e-179;
; Mismatches 0;
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Pred. No. 1
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RESULT 9
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; GENERAL INFORMATION:
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US-09-508-997A-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: UNSURE LOCATION: 51, 94 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 380
TYPE: PRT
ORGANISM: Rattus rattus
FEATURE:
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                                                                              FLFVIRKDDIILFSGKVSCP
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73.48;
               US/09936883A
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PRIOR FILING DATE: 1999-03-19
PRIOR PRICTION NUMBER: JP
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 380
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                       SUP IN NO 4
SEQ ID NO 4
                                                                                                                                 Sequence 4, Application US/10110030
GENERAL INFORMATION:
APPLICANT: MIYATA, TOSHIO
TITLE OF INVENTION: ANIMAL MODEL FOR MESENGIAL
TITLE OF INVENTION: NEPHRITIS
FILE REFERENCE: SHIM015
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Best Local S
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TITLE OF INVENTION: A Method for Detecting
TITLE OF INVENTION: Thereof
FILE REFERENCE: F2-101DPLPCT
CURRENT APPLICATION NUMBER: US/09/936,883A
CURRENT FILING DATE: 2001-12-21
                                                               PRIOR APPLICATION NUMBER: 11/285736
PRIOR FILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 15
                                                                                                       CURRENT APPLICATION NUMBER: US/10/110,030 CURRENT FILING DATE: 2002-04-03
                                                     SOFTWARE: FastSEQ
            LENGTH: 38
TYPE: PRT
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LOCATION: 51, 94
OTHER INFORMATION: Xaa is unknown
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 ORGANISM: Rattus norvegicus
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APPLICANT: MIYATA, Toshio
TITLE OF INVENTION: Megsin Protein
FILE REFERENCE: SHIM-004
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LENGTH: 368
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Matches 279;
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Best Local
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NAME/KEY: VARIANT
LOCATION: 51, 94
OTHER INFORMATION: Xaa
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NDVQDTREKINKWIENETHGKIKKVLGDSSLSSSAVMVLVNAVYEKGKWKSAFTKTDTLS
             NHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMYLVNAVYFKGKWQSAFTKSETIN
                                                 QPGLQYQLKRVLADINSSHKDYELSIATGVFAEKVYDFHKNYIECAENLYNAKVERVDFT
                                                              QSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEKLYDAKVERVDFT
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; Pred. No. 3.8e-133;
56; Mismatches 45;
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Pred. No. 2.5e
53; Mismatches
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Matches 270; Conserv
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APPLICANT: MIYATA, Toshio
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SEQ ID NO 21
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CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: JP 1999-75305
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: JP 1999-306623
PRIOR FILING DATE: 1999-10-28
NUMBER OF SEQ ID NOS: 21
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                                       LTFQNLMEWTNPRRWTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIFDESKADLSGIAS
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                                                                                                                                                                                                                                                                                                        74.48;
73.48;
                                                                                                                                                                                                                                                                                               ; Score 1458; DB 23;
; Pred. No. 2.5e-131;
53; Mismatches 45;
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77;

Score 796.5; DI Pred. No. 2e-67; Mismatches

DB 16;

120;

Indels Length 379

29;

Gaps

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60

225

ACID

SEQUENCE

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APPLICANT: Hubert, Rene S.
APPLICANT: Hubert, Rene S.
APPLICANT: Hubert, Rene S.
APPLICANT: Leong, Kahan
APPLICANT: Raitano, Arthur B.
APPLICANT: Raitano, Arthur B.
APPLICANT: Saffran, Douglas C.
TITLE OF INVENTION: PROSTAPIN GENE AND PROTEIN ANT FILE REFERENCE: 1703-005.US1
CURRENT APPLICATION NUMBER: US/09/283,946
CURRENT FILING DATE: 1999-04-01
EARLIER APPLICATION NUMBER: 60/080,167
EARLIER APPLICATION NUMBER: 60/085,720
EARLIER FILING DATE: 1998-03-31
EARLIER FILING DATE: 1998-05-15
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
US-10-110-030-6
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; TYPE: PRT
; ORGANISM: Mus musculus
US-10-110-030-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-283-946-2
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Best Local Similarity 73.4
270; Conservative
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FILE REFERENCE: SHIMO15
CURRENT APPLICATION NUMBER: US/10/110,030
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 11/285736
PRIOR APPLICATION NUMBER: 11/285736
PRIOR FILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/10110030 GENERAL INFORMATION: APPLICANT: Miyata, Toshio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, Application US/09283946 GENERAL INFORMATION:
         IJ
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US-09-852-911-946
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                                                   SOFTWARE: FastSEQ for Windows Version SEQ ID NO 946 SEQ ID NO 946 SERVICE SERVICE STREET STREET STREET SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE SERVICE
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Best Local Similarity
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                                                                                                                                                                                                                              APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Hepler, William
APPLICANT: Hural, John
APPLICANT: McNeill, Patricia D.
APPLICANT: McNeill, Patricia D.
APPLICANT: Houghton, Raymond L.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C25
                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/852,911
CURRENT FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 947
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ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Day, Craig H.
Vedvick, Thomas
Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fanger, Gary R. Retter, Marc W. Stolk, John A.
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          349 LPQSTLERADHPFLFVIR--KDDIILFSGKVSCP 380
                                   346 LPMRAQFKANHPFLFFIRHTHTNTILFCGKLASP 379
                                                                                                                                                                                             61 SHTVDSLKPGFKDSPKCSQAGRIHSEFGVEFSQINQPDSNCTLSIANRLYGTKTMAFHQQ 120
                                                                                                                                                                                                           61 -----NTASGYGNSSN-SQSG-LQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKD 113
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Search completed: July 11, 2003, 12:27:41 Job time: 1197.09 secs

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Perfect score:
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1 MASLAAANAEFCFNLFREMD......FLFVIRKDDIILFSGKVSCP
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Listing first 45 summaries
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:/cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep4:*
:/cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep4:*
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:/cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep4:*
:/cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep:*
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1 US-60-455-241-4692

1 US-09-936-883C-21

1 US-60-443-566-3717

1 US-60-443-566-3717

2 US-10-198-070-67

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2 US-10-198-070-67

2 US-10-198-070-67

2 US-10-198-070-67

2 US-10-198-070-67

2 US-10-198-070-67

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2 US-10-294-025-946

2 US-10-254-951-59

2 US-10-258-951-59

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Sequence 59, App
Sequence 416, App
Sequence 4407, /
Sequence 7462,
Sequence 7462,
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263, App
3006, Appl
4692, Ap
4692, Appl
21, Appl
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3717, Ap
5630, Ap
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67, Appl
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946, Appl
946, Appl
959, Appl
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US-60-465-241-4629	US-60-455-444-4629	US-60-453-050-8341	-453	US-60-448-285-3	PCT-US02-07215B-9	PCT-US03-12731-14	US-10-294-025-947	PCT-US02-07215B-14	US-60-448-285-6	US-10-295-027-794	US-10-295-027-177	US-10-126-052A-465	PCT-US02-07215B-13	PCT-US02-38526-417	US-09-724-676A-57391	US-09-724-676-57391	US-60-448-285-5	PCT-US03-17409-175	PCT-US02-07215B-12	PCT-US02-38526-408	US-60-465-241-7461	- 7	US-60-443-566-4406	US-10-419-277-2	PCT-US02-07215B-2
	Sequence 4629, Ap	Sequence 8341, Ap	8341,	Sequence 3, Appli	Sequence 9, Appli	Sequence 14, Appl	Sequence 947, App	Sequence 14, Appl	Sequence 6, Appli	79	Sequence 177, App	Sequence 465, App	Sequence 13, Appl	Sequence 417, App	Sequence 57391, A	Sequence 57391, A	Sequence 5, Appli	Sequence 175, App	Sequence 12, Appl	Sequence 408, App	7461,	Sequence 7461, Ap	Sequence 4406, Ap	e 2,	Sequence 2, Appli

ALIGNMENTS

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RESULT 1

US-09-036-883C-2

US-09-036-883C-2

Sequence 2, Application US/09936883C

Sequence 2, Application US/09936883C

GENERAL INFORMATION:

APPLICANT: MIYATA, Toshio

FILE OF INVENTION: A Method for Detecting Megsin Pro

FILE OF INVENTION: Thereof

FILE OF INVENTION: Thereof

CURRENT APPLICATION NUMBER: US/09/936,883C

CURRENT FILING DATE: 2001-12-21

PRIOR FILING DATE: 1999-03-19

PRIOR APPLICATION NUMBER: JP 1999-306623

PRIOR APPLICATION NUMBER: JP 1999-306623

PRIOR FILING DATE: 1999-10-28
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Best Local S
Matches 380
                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 21 SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 380
181
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             WOSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGGINMYVL
                                                                            LYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVNAVYFKGK 180
                                                                                                                                             NTASGYGNSSNSOSGLOSOLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK 120
                                                                                                                             NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK
WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRYNGG
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Conservative C
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Pred. No. 1.4e-181;
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; ORGANISM: Homo sapiens
US-10-126-052A-263
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PRIOR FILING DATE: 2001-04-18
PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR FILING DATE: 2001-05-10
PRIOR APPLICATION NUMBER: US 60/339,245
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR APPLICATION NUMBER: US 60/334,370
PRIOR FILING DATE: 2001-11-29
PRIOR FILING DATE: 2001-11-29
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SEQ ID NO 263
LENGTH: 380
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Murray, Richard
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer,
TITLE OF INVENTION: Methods of Screening for Modulators
FILE REFERENCE: 018501-001530US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR FILING DATE: 2002-04-12
NUMBER OF SEQ ID NOS: 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/126,052A CURRENT FILING DATE: 2002-04-18
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                                                                                                                                                                       NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK 120
               DESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLPQSTLFRADHP
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                                                                     LPENDLSEIENKLTFQNLMEWTNPRRWTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIF
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                                                       LPENDLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLKDIF
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Pred. No. 1.4e-181;
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; TYPE: PRT
; ORGANISM: Homo
US-60-443-566-3006
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                                                                                                                                                                                                                                                                                   US-60-455-444-4692
                                                                                                                                                     Sequence 4692, Application US/60455444
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION
NUMBER OF SEQ ID NOS: 50986
SOFTWARE: FastSEQ for Windov
SEQ ID NO 4692
LENGTH: 380
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CURRENT APPLICATION NUMBER: US/60/443,566

CURRENT FILING DATE: 2003-01-30

NUMBER OF SEQ ID NOS: 25102

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3006

LENGTH: 380
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Best Local :
                                                                                        FILE REFERENCE: CL001455
CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
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TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
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Pred. No. 1.4e-181;
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US-60-465-241-4692
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Best Local S
Matches 380
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TYPE: PRT
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Local :
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Pred. No. 1.4e-181;
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; NAME/KEY: misc_featu
; LOCATION: 51, 94
; OTHER INFORMATION: X
US-09-936-883C-19
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US-09-936-883C-19
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Best Local S
Matches 279
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APPLICANT: MIYATA, Toshio
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NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 19
LENGTH: 380
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TYPE: PRT
ORGANISM: Rattus
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Pred. No. 9e-135;
56; Mismatches 45;
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RESULT 8
US-60-443-566-3717
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                                                       NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 3717
LENGTH: 372
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APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
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                                                                                                                                                                                                                                   TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF FILE REFERENCE: CL001447
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                                                                                                                                                                           CURRENT FILING DATE:
                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/60/443,566
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ORGANISM:
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CURRENT FILING DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 5630
LENGTH: 372
                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS.
TITLE OF INVENTION: RHEUMATOID ARTHRITIS,
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                               WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRY-NGGINMYV 239
                                                                 WYQARLQTVDFEQSTEETRKTINAWVENKTNGKVANLFGKSTIDPSSVMVLVNAIYFKGQ 167
WQNKFQVRETVKSPFQLSEGKNVTVEMMYQIGTFKLAFVKEPQMQVLELPYVNNKLSMII
                                                                                                                                                                      NTASGYGNSSNSQSGLQSQLKRVFSDINASHKDYDLSIVNGLFAEKVYGFHKDYIECAEK 120
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43.1%; Pred. No. 3.6e-71;
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US-60-465-241-5630
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US-60-465-241-5630
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HENGTH: 372
TYPE: PRT
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APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
Sequence 62, Application US/10198070
GENERAL INFORMATION:
APPLICANT: AVERBACK, PAUL
APPLICANT: GENMELL, JACK
TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TREATMENT OF TUMORS AND OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 5630, Application US/60465241
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CURRENT FILLING DATE: 2003-04-23
NUMBER OF SEO ID NOS: 258418
SOFTWARE: F8stSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: GENETIC POLYMORPHISMS TITLE OF INVENTION: RHEUMATOID ARTHRITIS, FILE REFERENCE: CL001468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
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Similarity 43.1%;
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                                                                                                                                              NHPFLFFIRHTHTNTILFCGKLASP 372
                                                                                                                                                                                                                                                                                                                                                          WQSAFTKSETINCHFKSPKCSGKAVAMMHQERKFNLSVIEDPSMKILELRY-NGGINMYV
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                                                                                                                                                                                                             DLFNQVKADLSGMSPTKGLYLSKAIHKSYLDVSEEGTEAAAATGDSIAVKSLPMRAQFKA
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                                                                                                                                                                                                                                                                                                       LLPEN--DLSEIENKLTFONLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQYLRALGLK 297
                                                                                                                                                                                                                                                                                                                                      WQNKFQVRETVKSPFQLSEGKNVTVEMMYQIGTFKLAFVKEPQMQVLELPYVNNKLSMII
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; Pred. No. 3.6e-71;
75; Mismatches 126;
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US-10-198-070-67
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    SEQ
                                                                                                                            TITLE OF INVENTION: PEPTIDES EFFECTIVE IN THE TITLE OF INVENTION: CONDITIONS REQUIRING THE TITLE OF INVENTION: CELLS FILE REFERENCE: 59003.000008

CURRENT APPLICATION NUMBER: 05/10/198,070

CURRENT FILING DATE: 2002-07-19

PRIOR APPLICATION NUMBER: 60/306,161
   PRIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 125
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 67
                                                                                 PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR FILING DATE: 2001-07-19
                                                                                                                                                                                                                                           APPLICANT: AVERBACK, PAUL APPLICANT: GEMMELL, JACK
                                                                  PRIOR APPLICATION NUMBER: 60/331,477
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TREATMENT OF TUMORS AND REMOVAL OR DESTRUCTION C

OTHER

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US-10-198-070-62
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LENGTH: 392
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PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/306,150
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CURRENT APPLICATION NUMBER: US/10/198,070

CURRENT FILING DATE: 2002-07-19
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PRIOR APPLICATION NUMBER: 60/331,477
PRIOR FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 125
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                               YIECAEKLYDAKVERVDFTNHLEDTRRNINKWVENETHGKIKNVIGEGGISSSAVMVLVN 173
MRAQFKANHPFLFFIRHTHTNTILFCGKLASP 392
                        QSTLFRADHPFLFVIR--KDDIILFSGKVSCP 380
                                                                                                           LRALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQLP 350
                                                                                                                                                                                                                                                      TIYFKGQRQNKFQVRETVKSPFQLSEGKNVTVEMMYQIGTFKLAFVKEPQMQVLELPYVN
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                                                                                   GGINMYVLLPEN--DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMKQY 290
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TITLE OF INVENTION: CONDITIONS REQUIRING TH
TITLE OF INVENTION: CONDITIONS REQUIRING TH
TITLE OF INVENTION: COLLS
FILE REFERENCE: 59003.00008
CURRENT APPLICATION NUMBER: US/10/198,070
CURRENT FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,161
PRIOR FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR APPLICATION NUMBER: 60/306,150
PRIOR APPLICATION NUMBER: 60/301,477
PRIOR FILING DATE: 2001-11-16
PRIOR FILING DATE: 2001-11-16
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US-10-198-070-70
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                                                                                                                 Query Match
Best Local S
Matches 169
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Best Local Similarity
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                                                                                                                                                                                                                                               LENGTH:
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                                                          MASLAAANAEFCENLFREMDDNQGNGNVFFSSLSLFAALALVRLGAQDDSLSQIDKLLHV
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                                                                                                                 Conservative
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                                                                                                                              41.8%; Score 819; DB 12;
43.1%; Pred. No. 7.7e-71;
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                                                                                                                 Pred. No. 7.7e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 820; DB 12;
Pred. No. 6.2e-71;
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; ORGANISM: Homo
US-10-294-025-946
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US-10-294-025-946
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 946
LENGTH: 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 946, Applic GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Xu, Jiangchun
APPLICANT: Stolk, John A.
APPLICANT: Stolk, John A.
APPLICANT: Kalos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
FILE REFERENCE: 210121.427C29
CURRENT APPLICATION NUMBER: US/10/294,025
CURRENT FILING DATE: 2002-11-12
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   349
                                       286
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 LPQSTLFRADHPELFVIR--KDDIILFSGKVSCP
                                                            QYLRALGLKDIFDESKADLSGIASGGRLYISRMMHKSYIEVTEEGTEATAATGSNIVEKQ 348
                                                                                                               VNNKLSMIILLPVGIANLKQIEKQLNSGTFHEWTSSSNMMEREVEVHLPRFKLEIKYELN
                                                                                                                                                -NGGINMYVLLPEN--DLSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMK 288
                                                                                                                                                                                                                                                                                                                                                                                                                     MGSLSTANVEFCLDVFKELNSNNIGDNIFFSSLSLLYALSMYLLGARGETAEQLEKVLHF
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                                     SLLKPLGVTDLFNQVKADLSGMSPTKGLYLSKAIHKSYLDVSEEGTEAAAATGDSIAVKS
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42.68;
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Pred. No. 1.1e-68;
Prematches 120;
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29;

Gaps

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APPLICANT: LAI, VING-TA
APPLICANT: X16, Q1ng
TITLE OF INVENTION: NOVEL COMPOUNDS
FILE REFERENCE: G550025
CURRENT APPLICATION NUMBER: US/10/258,951
CURRENT FILING DATE: 2002-10-28
PRIOR APPLICATION NUMBER: PCT/US01/1360
PRIOR APPLICATION NUMBER: 60/199,963
PRIOR FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: 60/203,336
PRIOR FILING DATE: 2000-05-11
PRIOR APPLICATION NUMBER: 60/207,087
PRIOR APPLICATION NUMBER: 60/207,087
PRIOR APPLICATION NUMBER: 60/207,546
PRIOR APPLICATION NUMBER: 60/207,546
PRIOR APPLICATION NUMBER: 60/207,546
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/207,546
PRIOR APPLICATION NUMBER: 60/207,546
PRIOR FILING DATE: 2000-05-26
SEQ ID NO 59
LENGTH: 394
TYPE: PRT
ORGANISM: Homo sapiens
US-10-258-951-59
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APPLICANT: Murdock, Paul R.
APPLICANT: Rizvi, Safia K.
APPLICANT: Smith, Randall F
APPLICANT: Xiang, Zhaoying
APPLICANT: Kabnick, Karen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 39.3%; Score 769; DB 12; Length 394; Best Local Similarity 40.1%; Pred. No. 5.6e-66; Matches 158; Conservative 88; Mismatches 134; Indels 14;
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361
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                                                                                                            289 QYLRALGLKDIFDESKADLSGIASGGRLYISRMMKSYIEVTEEGTEATAATGSNIVEKQ 348
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                                                                                                                                                                                                                              INMYVLLPEND-----LSEIENKLTFQNLMEWTNPRRMTSKYVEVFFPQFKIEKNYEMK 288
                                                                                                                                                                                                                                                                            YFKAKWETYFDHENTVDAPFCLNANENKSVKMMTQKGLYRIGFIEEVKAQILEMRYTKGK 240
LRSWVEFNANHPFLFFIRHNKTQTILFYGRVCSP 394
                                         LPQSTLFRADHPFLFVIR--KDDIILFSGKVSCP 380
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Kabnick, Karen
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Search completed: July 11, 2003, 12:35:14 Job time : 358.189 secs

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Result
No.
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Maximum DB seq length: 2000000000
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Match
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Gapop 10.0 , Gapext 0.5
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232.223 Million cell updates/sec
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Drosophila melanog
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Porphorymonas ging Partial human PIGR Porphorymonas ging Human PIGR-1. Hom Human PRO polypept Amino acid sequenc		Ø HOOO	Human megakaryocyt Rat A3 adenosine r Fungal ZBC protein Human polypeptide Fungal ZBC protein Drosophila melanog Drosophila melanog Novel central nerv Human nervous syst Human cDNA SEQ ID Novel human calciu

ALIGNMENTS

Human megakaryocyte differentiation factor.

16-AUG-1994 AAR48379;

(first entry)

AAR48379 standard; Protein; 380

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RESULT 1
AARR 8379
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    WPI; 1994-058782/08.
N-PSDB; AAQ56670.
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04-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-FEB-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EP583884-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                                Tsujimoto M,
                                                                                                                                                                                                                                                             (SUNR ) SUNTORY LTD. (TSUJ/) TSUJIMOTO M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-JUL-1993;
                                                                                                                                                                               rshida N,
                                                                                                                                Iwasa F, Kuri
M, Tsuruoka N,
                                                                                                                                                                                                                                                                                                                                                                                                  92JP-0212305
93JP-0067339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93EP-0305654
                                                                                                                                                                               Kurihara T,
                                                                                                                            ara T, Miura K, Nakazato
Yamaguchi N, Yamaichi K;
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Best Local S
Matches 9
  Best Lo
                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nument mur can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietin making it useful for treatment of diseases involving a decrease in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55-57kD by SDS-PAGE and exhibits an isoelectric point of 6.0-7.0.
                                                                                                                                                                                       WPI;
                                                                        This invention describes the isolation of novel megsin nucleic acid; proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangia
                                                                                                                                                                                                                                (KURO/)
                                                                                                                                                                                                                                                                                                                                                      Homo
                                           Sequence
                                                                 cells,
                                                                                                                              Claim 1; Page 62-64; 100pp; Japanese.
                                                                                                                                                     Megsin protein expressed specifically
                                                                                                                                                                            N-PSDB;
                                                                                                                                                                                                           Miyata T;
                                                                                                                                                                                                                                                                22-SEP-1997;
                                                                                                                                                                                                                                                                                     22-SEP-1998;
                                                                                                                                                                                                                                                                                                           01-APR-1999
                                                                                                                                                                                                                                                                                                                                WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                                          human; rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                    Megsin; mesangial cell;
                                                                                                                                                                                                                                                                                                                                                                                                         Human megsin
                                                                                                                                                                                                                                                                                                                                                                                                                               14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY08254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY08254 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 7; Page 30-32; 47pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           decrease in platelets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New megakaryocyte differentiation epidermoid carcinoma cells, used t
           Local
                                                                                                                                                                           1999-276983/23.
DB; AAX56712.
                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188 SETINCHFK 196
                                                                 such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    _
                                                                                                                                                                                                                                KUROKAWA K.
MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
9; Conserv
 Similarity
9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SETINCHEK
                                            380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  380 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                               IgA
                                           Ą,
                                                                                                                                                                                                                                                                97JP-0275302
                                                                                                                                                                                                                                                                                     98WO-JP04269
                                                               nephropathy.
          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cells,
                                                                                                                                                                                                                                                                                                                                                                                    treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
          Score 52;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 52;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      to treat c
                                                                                                                                                                                                                                                                                                                                                                                  diagnosis; disease;
                                                                                                                                                   in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 15;
. 0.092;
           0.092;
                    DB 20;
                                                                         diseases involving mesangial

    isolated
conditions

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                    Length 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               from human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    involving
                                                                                                                                                                                                                                                                                                                                                                                   IgA nephropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                         and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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Conservative

Mismatches

0;

Indels

0

Gaps

0;

RESULT 4
AAB83075
ID AAB8
XX
AC AAB8

AAB83075

standard; Protein; 380

AAB83075;

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                                                         Query Match
Best Local
                                             Matches
                                                                                                          The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (C) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                          Evaluating renal function comprises assaying megsin protein biological sample \ \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IgA; immunoglobulin A; detection; red
diagnosis; biological sample; blood;
                                                                                          Sequence
                                                                                                                                                                                                                                                   Example 2; Page 66-69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB24142;
                                                                                                                                                                                                                                                                                                            N-PSDB;
                                                                                                                                                                                                                                                                                                                        WPI; 2000-611642/58
                                                                                                                                                                                                                                                                                                                                            Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200057189-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Megsin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB24142
                                                                                                                                                                                                                                                                                                                                                                   (MIYA/)
                                                                                                                                                                                                                                                                                                                                                                                         (KURO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                               (FUSO
188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
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                                                                                                                                                                                                                                                                                                                                                                   MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                            KUROKAWA K.
FUSO PHARM IND LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mesangium-predominant gene; serpin regulated; no
munoglobulin A; detection; renal function; renal
                                           similarity
9; Conserv
                                                                                                                                                                                                                                                                                                            AAA99294
SETINCHFK
                     SETINCHEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard; Protein; 380 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SETINCHEK 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SETINCHEK
                                                                                         380 AA;
                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-JP01646.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                               99JP-0075305
99JP-0306623
                      9
196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence
                                                                                                                                                                                                                                                  93pp; Japanese.
                                             0;
                                                      Pred. No. 0.092;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ
                                                                  Score 52;
                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ij
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                                                                   DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             regulated; nephropathy;
                                                                 21;
                                             0,
                                                                 Length
                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disorder;
                                           0
                                                                                                                                                                                                                                                                                      'n
                                           Gaps
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Matches
                                                                                                                                                                                                                                                                                                                Query Match
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                                01-APR-1999
                                                                          Rattus rattus
                                                                                              Megsin; mesangial cell; human; rat; murine.
                                                                                                                             Rat megsin protein.
                                                                                                                                                   14-JUL-1999
                                                                                                                                                                        AAY08255;
                                                                                                                                                                                             AAY08255 standard; Protein;
                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 4; Page 44-46; 62pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-300136/31.
N-PSDB; AAF82438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-JUL-2001
           22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                         Local Similarity 100 nes 9; Conservative
                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                             SETINCHEK
                                                                                                                                                                                                                                                 SETINCHEK 196
                                                                                                                                                                                                                                                                                                                                     380 AA;
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                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99JP-0285736
           98WO-JP04269
                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                         treatment;
                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                   Score 52; DB 22; Pred. No. 0.092;
                                                                                                                                                                                             Ā
                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                        diagnosis;
                                                                                                         disease;
                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                               Length
                                                                                                        IgA nephropathy;
                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                         Gaps
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Best Local Similarity
Matches 5; Conser
                                                                                                                                                                                                                                                                 Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
Evaluating renal function biological sample -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial
                                                        Miyata
                                                                                                                                                                                                                                                                                                                                                             AAB24150 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 69-72; 100pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Megsin protein expressed specifically in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; AAX56712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Miyata T;
                             N-PSDB;
                                                                       (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND
(MIYA/) MIYATA T.
                                                                                                             19-MAR-1999;
28-OCT-1999;
                                                                                                                                       17-MAR-2000; 2000WO-JP01646
                                                                                                                                                          28-SEP-2000
                                                                                                                                                                           WO200057189-A1
                                                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                   Rattus norvegicus.
                                                                                                                                                                                                                                                                                                        Rat megsin protein
                                                                                                                                                                                                                                                                                                                          30-JAN-2001
                                                                                                                                                                                                                                                                                                                                             AAB24150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cells, such as IgA nephropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-276983/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-SEP-1997;
                           2000-611642/58
DB; AAC55238.
                                                                                                                                                                                                                                                                                                                                                                                                           188 SDTLSCHFR
                                                        Τ,
                                                                                                                                                                                                                                                                                                                                                                                                                             SETINCHEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   380 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                             99JP-0075305
99JP-0306623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97JP-0275302
                                                                                                                                                                                                      94
                                                                                                                                                                                              /note-
                                                                                                                                                                                                              'note-
                                                                                                                                                                                                                                                                                                                                                                                                           196
                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                        sequence
                                                                                                                                                                                                                                                                                                                                                              Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        75
                                                                                  LTD
                                                                                                                                                                                             "unspecified"
                                                                                                                                                                                                              "unspecified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 69;
                                                                                                                                                                                                                                                                                                                                                              380
                                                                                                                                                                                                                                                                                                        SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                4.
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Pred. No.
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                                                                                                                                                                                                                                                                                                         NO:19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
26;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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comprises assaying megsin

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RESULT 7
AAG64286
ID AAG64286
XX AAG6
XX AAG6
XX AAG6
XX AAG6
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                                                                                                                                                    The present invention relates to a novel antibody which recognises a peptide consisting of residues 341-354 of rat megsin protein. The present sequence is the protein sequence regain, which was used in the present invention. Mesgin is highly expressed in renal mesangial cells and its level is elevated in mesangium proliferative nephritis. Assay of the serum or urine level using the antibody is therefore indicative of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rat;
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(MIYA/) MIYATA T.
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                                                                                                                                                                                                                                          sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useffor analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                     26-MAR-2002
                                           ABB62242;
                                                               ABB62242 standard;
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N-PSDB; AAF82439.
                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                 this method.
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(MIYA/) MIYATA T.
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                                                                                                                                                                 Conservative
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Drosophila melanogaster polypeptide SEQ ID NO 13518

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 13518; 21pp + Sequence Listing; English
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11-JUL-2000; 2000US-0614150.
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6; Conser
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                                                                                                                                                                                                                                                                               developmental biology; cell signalling; insecticide;
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RESULT 11
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Best Local Similarity
Matches 6; Conser
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                                                                                                                  17-JUL-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                               Misc-difference
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(ABB57737-ABB72072)
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Ishida N,
                                                                                                                                                                                          19-JUL-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
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                                          (SUNR ) SUNTORY LTD.
(TSUJ/) TSUJIMOTO M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              marrow transplantation;
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93JP-0067339
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100.0%;
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RESULT 12
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                                                                                                               WPI;
                                                                                                                                Civelli O,
                                                                                                                                                                                                                                                                                                                           Rat
                                        Claim 1;
                                                            DNA and protein sequence(s) for novel recombinant vector contg the DNA, DNA transformed with the vector.
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                 A3 adenosine receptors produced from cloned genes may be
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                                                                                                                                                                         02-AUG-1993;
                                                                                                                                                                                 03-MAR-1992;
                                                                                                                                                                                                     03-MAR-1992;
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                                                                                                                                                                                                                                                               Rattus rattus
                                                                                                                                                                                                                                                                                  antagonist;
restriction
                                                                                                                                                                                                                                                                                                     A3 adenosine receptor; screening; identification; agonist;
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                                                                                                                               zhou Q;
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fragment
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93US-0101435
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           for A3
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                                                                                                                                                                                                                                                                                 probe; detection; genetic disorder; RFLP;
ent length polymorphism.
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87.5%;
 adenosine receptor activity,
of adenosine agonist or antage
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Pred. No.
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antagonist drug
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          The invention relates to improving the production of a secondary cometabolite by a fungus. This involves modulating the expression of at cleast one ZBC (zinc binuclear cluster protein) gene in a manner to cimprove the yield of the secondary metabolite. Methods of the invention come was defined in the production of the secondary metabolite e.g. can be used for improving the production of the secondary metabolite e.g. can any be used for improving the production of the secondary metabolite e.g. can any be used for improving the production of the secondary metabolite e.g. can are secondary metabolite and insurance in the secondary metabolite. Secondary metabolite is used to a lovastin or mewastatin), an immunosuppressant (such as cyclosporin A), can argot alkaloid (such as ergotamine), an angiogenesis inhibitor (such as ovalicin), a glucan synthase inhibitor, gliotoxin family of compounds, can so ovalicin, a modulator of cell surface receptor signalling, a plant compound. The method results in a decrease in fermentor run-time, a decrease in the size of the fermentor required for the production of compounds. The method results in a decrease in the production of the secondary metabolite, or a decrease in the biomass required for the production, which translates into decrease in the secondary metabolite.
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Matches
                                                                                                                                                                                                                                                                                                                                   New method for improving the production of a secondary metabolite e.g. antineoplastic agent, ergot alkaloid from a fungus involves modulation of the expression of at least one zinc binuclear cluster protein gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Secondary metabolite; fungus; ZBC gene; zinc binuclear cluster antibacterial; beta-lactam; anti-hypercholesterolaemic; lovasti mevastatin; immunosuppressant; cyclosporin A; ergot alkaloid; e angiogenesis inhibitor; ovalicin; glucan synthase inhibitor; gl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     solution. The DNA or its fragments may also be used as probes determine tissue distribution of the receptors, to detect the presence or absence of the gene or in RFLP to detect genetic disorders.
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                                                                                                                                                                                                                                                                                       Disclosure;
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insecticide; antineoplastic.
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DB; ABN79827.
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                                                                                                                                                                                                                                               The invention relates to human polynucleotides (AAI79941-AAI93841) and the encoded proteins (AA000010-AA013910) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The polynucleotides and polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoissis regulating activity, tissue growth factor activity, immunomodulatory activity and activity indicated activity and may be useful in the diagnosis and/or the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the c
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                                                                       Note: The sequence data for this patent did specification, but was obtained in electron at ftp.wipo.int/pub/published_pct_sequences
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18-MAY-2000; 2000US-0577409
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Matches 6; Conserv
                                                                                                                                            as lovastin or mevastatin), an immunosuppressant (such as cyclosporin A), an ergot alkaloid (such as ergotamine), an angiogenesis inhibitor (such as ovalicin), a glucan synthase inhibitor, gliotoxin family of compounds, a fungal toxin, a modulator of cell surface receptor signaling, a plant growth regulator, a pigment, an insecticide, or an antineoplastic compound. The method results in a decrease in fermentor run-time, a decrease in the size of the fermentor required for the production of equivalent amounts of the secondary metabolite, or a decrease in the biomass required for the production, which translates into decreased waste that must be handled in downstream processing. The sequences given in records ABP35575-ABP35722 represent ZBC proteins. Note: The sequence data for this patent did not form part of the printed specification, but was obtained directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to improving the production of a secondary metabolite by a fungus. This involves modulating the expression of at least one ZBC (zinc binuclear cluster protein) gene in a manner to improve the yield of the secondary metabolite. Methods of the invention may be used for improving the production of the secondary metabolite e.g. antibacterial (such as beta-lactam), an anti-hypercholesterolaemic (such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Secondary metabolite; fungus; ZBC gene; zinc binuclear cluster protein; antibacterial; beta-lactam; anti-hypercholesterolaemic; lovastin; mevastatin; immunosuppressant; cyclosporin A; ergot alkaloid; ergotamine; angiogenesis inhibitor; ovalicin; glucan synthase inhibitor; gliotoxin; fungal toxin; cell surface receptor; plant growth regulator; pigment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID 264; 49pp + sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New method for improving the production of a secondary metabolite e.g. antineoplastic agent, ergot alkaloid from a fungus involves modulation of the expression of at least one zinc binuclear cluster protein gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABP35700 standard;
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                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
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Search completed: July 11, 2003, 11:54:17 Job time : 6.16424 secs	Qy 2 ETINCHEK 9 : : Db 470 KTLQCHEK 477	Best Local Similarity 62.5%; Pred. No. 2.3e+02; Matches 5; Conservative 2; Mismatches 1; Indels
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PCT-US91-02166-13

US-07-956-483-17

US-08-472-240A-8

US-08-472-240A-8

US-08-472-240A-8

US-08-453-911-3

US-08-453-913-4

US-08-955-937A-4

US-09-300-985-2

US-09-300-985-2

US-09-300-985-2

US-09-300-985-2

US-09-300-985-2

US-09-300-985-7

US-08-484-5588-7

US-08-480-751-7

US-08-480-751-7

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US-08-611-977-1
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APPLICANT:
APPLICANT:
APPLICANT:
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ADDRESSEE: Burns, Do
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: P.O. Box
CITY: Alexandria
STATE: Virginia
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34 65.4 1079 2 US-08-943-986-8 34 65.4 1079 3 US-08-353-784-8 34 65.4 1079 3 US-08-364-719B-8 35 65.4 1079 4 US-08-484-159-8 36 65.4 1085 1 US-08-484-159-8 37 65.4 1085 1 US-08-485-588-5 38 65.4 1085 2 US-08-485-588-5 39 65.4 1085 2 US-08-485-588-5 39 65.4 1085 2 US-08-485-588-5 39 65.4 1085 2 US-08-485-588-5 39 65.4 1085 2 US-08-484-759-5 39 65.4 1085 3 US-08-348-719B-5 39 65.4 1085 3 US-08-383-784-5 39 65.4 1085 3 US-08-484-719B-5 39 65.4 1088 1 US-08-484-565-6 39 65.4 1088 2 US-08-484-565-6 39 65.4 1088 2 US-08-484-565-6 39 65.4 1088 2 US-08-484-565-6 39 65.4 1088 2 US-08-33-784-5 39 65.4 1088 3 US-08-348-65-6 39 65.4 1088 3 US-08-348-65-6 39 65.4 1088 3 US-08-33-784-6 39 65.4 1088 3 US-08-33-784-6 39 65.4 1088 3 US-08-33-784-6 39 65.4 1088 3 US-08-484-565-6 39 65.4 1088 3 US-08-33-784-6 39 65.4 1088 3 US-08-33-784-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6 39 65.4 1088 3 US-08-484-719B-6
1079 2 US-08-943-986-8 1079 3 US-08-353-784-8 1079 3 US-08-484-7198-8 1079 4 US-08-484-7198-8 1085 1 US-08-484-559-8 1085 1 US-08-484-551-5 1085 2 US-08-943-986-5 1085 2 US-08-943-986-5 1085 3 US-08-943-986-5 1085 3 US-08-943-986-5 1088 1 US-08-484-7198-5 1088 1 US-08-484-7198-6 1088 2 US-08-943-986-6 1088 2 US-08-943-986-6 1088 2 US-08-943-986-6 1088 3 US-08-353-784-6 1088 2 US-08-484-751-6 1088 2 US-08-484-751-6 1088 3 US-08-484-751-6 1088 3 US-08-484-751-6 1088 2 US-08-484-751-6 1088 2 US-08-484-751-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-784-6 1088 3 US-08-684-88-88-88-88-88-88-88-88-88-88-88-88-8
2 US-08-943-986-8 Sequence 8 3 US-08-484-719B-8 Sequence 8 4 US-08-484-719B-8 Sequence 8 4 US-08-484-159-8 Sequence 8 1 US-08-485-588-5 Sequence 5 2 US-08-480-751-5 Sequence 5 2 US-08-943-986-5 Sequence 5 2 US-08-484-719B-5 Sequence 5 3 US-08-484-159-5 Sequence 5 4 US-08-484-159-5 Sequence 5 1 US-08-484-551-6 Sequence 6 2 US-08-484-159-6 Sequence 6 2 US-08-484-719B-6 Sequence 6 2 US-08-484-719B-6 Sequence 6 2 US-08-484-751-6 Sequence 6 2 US-08-484-751-6 Sequence 6 3 US-08-484-751-6 Sequence 6 2 US-08-484-751-6 Sequence 6 3 US-08-484-751-6 Sequence 6 3 US-08-484-751-6 Sequence 6 3 US-08-484-751-6 Sequence 6 3 US-08-484-751-6 Sequence
Sequence 8, Sequence 8, Sequence 8, Sequence 8, Sequence 5, Sequence 5, Sequence 5, Sequence 5, Sequence 6, Sequen
Sequence 8, Sequence 8, Sequence 8, Sequence 8, Sequence 5, Sequence 5, Sequence 5, Sequence 5, Sequence 6, Sequen
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ALIGNMENTS

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Sequence 1, Application US/08611977 Patent No. 5972886 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/611,977
FILING DATE: 06-MAR-1996
CLASSIFICATION: 435
CRICK APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
ADDITICATION DATA:
APPLICATION UMBER: TD 4-213305
TELEFAX: (703) 836-2021 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                               APPLICATION NUMBER: JP 4-2
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-0
FILING DATE: 04-MAR-1993
ATTORNEY_AGENT INFOCMATION:
NAME: MCGOWAN, MALCOLM K.
                                                    REFERENCE/DOCKET NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEPAN: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                      NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: United States ZIP: 22313-1404

    I: KURIHARA, Tatsuya
    T: YAMAICHI, KOZO
    T: YAMAUCHI, NO. 5972886om1
    INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR

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TSUROUOKA, No. 5972886uo
NAKAZATO, Hiroshi
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; TOPOLOGY: 1:
; MOLECULE TYPE:
US-08-472-659-34
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Best Local Similarity
Thes 9; Conserv
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 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                             TELEFAX: (703) 836-202 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tent No.
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: JP 5
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Rel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                           REFERENCE/DOCKET NUMBER: 001560-248
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
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                                                                                            LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/01
FILING DATE: 07-JUN-1995
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: si
TOPOLOGY: linear
                                                                                                                                                                                                           REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RY: United States 22313-1404
                                                                             amino acid
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                                                                                                                                                                                                      McGowan, Malcolm K.
RATION NUMBER: 39,300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: Burns, Doane, Swecker & Mathis P.O. Box 1404
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YAMAGUCHI, NO. 5831030omi
MEGAKARYOCYTE DIFFERENTIATION FACTOR
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NAKAZATO, Hiroshi
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100.0%;
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                                                                                                                                                                                                                                                                                                                       JP 5-067339
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Pred. No. 2e+
); Mismatches
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Score 52;

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US-08-474-661-34
                                                       Best Local Similarity
Matches 9; Conser
                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                           TELEFAX: (703) 836-66 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 00 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                             FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 17-JUL-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Rel-
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
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                                                                                                                                                                          LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/01
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM:
                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: JP 4-212305
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
188 SETINCHFK 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188 SETINCHFK 196
                           1 SETINCHFK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 SETINCHEK 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RY: United States
22313-1404
                                                                                                                                                                                                                                                                                                  REA, TERESA STANEK
                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             George Mason Bldg., Washington & Prince Sts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YAMAGUCHI, NO. 58742530mi
VENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TSURUOKA, No. 5874253uo
NAKAZATO, Hiroshi
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                                                           Conservative
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SYSTEM: PC-DOS/MS-DOS
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836-34:
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                                                                       Score 52; DB 2;
Pred. No. 0.028;
                                                         Mismatches
                                                                                     DB 2;
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                                                                                   Length 380;
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                                                                                                                             US-08-472-659-1
                                                                Sequence 1, Application Patent No. 5831030 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
TOPOLOGY: linear
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APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: MCGOWAN, MAICOIM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 936-6620
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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APPLICANT: YAMAGUCHI, KOZO
APPLICANT: YAMAGUCHI, NO. 5972886omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                       APPLICANT:
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PRIOR APPLICATION DATA:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: Alexandria
STATE: Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
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188 SETINCHFK 196
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TSUJIMOTO, Masafumi
IWASA, Fuyuki
TSUROUOKA, No. 5831030uo
NAKAZATO, Hiroshi
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RESULT 6
US-08-474-661-1
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                                                                                                                                                                                                                                    GENERAL INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC-DOS/MS-DOS
DEPORTING SYSTEM: PC-DOS/MS-DOS
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APPLICANT:
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APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
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PRIOR APPLICATION DATA:
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APPLICANT: YAMAICHI, KOZO

APPLICANT: YAMAGUCHI, NO. 5831030cmi

TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
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Local Similarity 87.5%;
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KURIHARA, Talsu,-
KURIHARA, Talsu,-
YAMAICHI, KOZO
YAMAGUCHI, NO. 58742530mi
YAMAGUCHI, NO. 58742530mi
YAMAGUCHI, NO. 58742530mi
YAMAGUCHI, NO. 58742530mi
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TSURUOKA, No. 5874253uo
NAKAZATO, Hiroshi
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KURIHARA, Tatsuya
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RESULT 7
US-08-101-435-4
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FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA: JP 5-067339
APPLICATION NUMBER: JP 5-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
REGISTRATION NUMBER: 30,427
REGISTRATION NUMBER: 30,427
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                                        COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.
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APPLICANT: Zhou, Qun-yong
TTTTER OF INVENTION: A No. 5441883el Adenosine Receptor and Uses
                                                                                                                                                                                                                                            TITLE OF INVENTION: A NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                               SOFTWARE: PatentIn Rel
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PRIOR APPLICATION NUMBER: US 08/091,028
APPLICATE: 14-JUL-1993
FILING DATE: 14-JUL-1993
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STREET: IV
TTMY: Chicago
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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TOPOLOGY: lir
APPLICATION NUMBER: FILING DATE:
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CLASSIFICATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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10 South Wacker Drive, Suite 3000
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Pred. No. 2e+05;
0; Mismatches
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13, Application PC/TUS9102166
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
TITLE OF INVENTION: HIV Envelope PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                              TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 312-715-1234
TELEX: 910-221-5317
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 63
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/266-2614
TELEFAX: 415/952-9881
                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                         FILING DATE: 03-APRIL-1990 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
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MEDIUM TYPE: 5.25 in
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LENGTH: 320 amino acid
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: POFILING DATE: 19910401
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                                                                                                                              LENGTH:
                                                                                                                                                                                             TELEFAX:
                                                                                                                                                                                                                                                                 REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: U.S.S. FILING DATE: 03-APRIL-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 312-715-1000
TELEFAX: 312-715-1234
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             163 SSTLSCHFR 171
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             South San Francisco
                                                                                                            AMINO ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genentech,
                                                                                                                                                                                                                                                                             Carolyn
                            67.3%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HIV Envelope Polypeptides
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360 Kb floppy disk
             Score 35; DB Pred. No. 52; 0; Mismatches
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Pred. No. 14;
                                             <u>ن</u>
                                             Length 481;
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Query Match
Best Local Similarity
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US-07-956-483-17
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                             Sequence 8, Application US/08472240A
Patent No. 6284248
GENERAL INFORMATION:
APPLICANT: KIENY, Marie-Paule
TITLE OF INVENTION: NOVEL HYBRID,
TITLE OF INVENTION: 9p160 VARIANT
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 858 amino acids
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APPLICATION NUMBER: WO 92/19742
FILLING DATE: 12-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 91 05392
FILING DATE: 02-MAY-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NOVEL HYBRID, TITLE OF INVENTION: 9p160 VARIANT
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                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
STRANDEDNESS: sin
TOPOLOGY: linear
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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STATE: Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: United States ZIP: 22313-1404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Crane-Feury, Sharon E
REGISTRATION NUMBER: 36,113
REFERENCE/DOCKET NUMBER: 01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
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                                                                                                                                                                                                              159
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                                                                                                                                                                                                                                                                               Conservative
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BURNS, DOANE, SWECKER & MATHIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                           single
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85.78;
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Pred. No.
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                                                             SOLUBLE AND UNCLEAVED
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95;
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RESULT 11
US-08-463-911-3
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Best Local Similarity &
"""rches 6; Conservat
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; LOCATION:
US-08-472-240A-8
                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/08463911 Patent No. 5869330
                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (703) 836-202
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICATION NUMBER: US 07/956,483
FILING DATE: 31-DEC-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                              CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                 APPLICANT:
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FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Teskin, Robin L. REGISTRATION NUMBER: 3
                                                                                                                                                                          COUNTRY: U
ZIP: 02173
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STRANDEDNESS: not
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                                                                                             SOFTWARE:
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Lodish, Harvey F.
VENTION: A NOVEL SERUM PROTEIN PRODUCED
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                                                                                           PatentIn Release #1.0, Version #1.30
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SYSTEM: PC-DOS/MS-DOS
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85.7%;
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Pred. No.
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; MOLECULE TYPE: US-08-955-937A-4
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US-08-955-937A-4
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Best Local Similarity
Watches 5; Conserve
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     Best Local
Matches
                      Query Match
Best Local
                                                                                                                                                                  TELEX: 846169
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                              APPLICATION NUMBER: 60/056,152

FILING DATE: 19-AUG-1997

ATTORNEY/AGENT INFORMATION:
NAME: PRESTIA, PAUL F
REGISTRATION NUMBER: 23,031
REFERENCE/DOCKET NUMBER: GH-7022
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-407-0700
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                        SUFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
APPLICATION WINDOWS
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PRIOR APPLICATION DATA:
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APPLICANT: TRUNEH, ALEMSEGED
TITLE OF INVENTION: PIGR-1, &
TITLE OF INVENTION: GENE SUPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: 1i
MOLECULE TYPE:
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                                                                                                   TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                  TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/955,937A FILING DATE: 17-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: VALLEY FORGE
                                                                                                                                                 LENGTH:
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STRANDEDNESS: sir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
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   Similarity 5; Conserv
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   Conservative
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O. BOX 980
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~~R: WHI95-05
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Score 34; DB Pred. No. 31; 2; Mismatches
                                                                                                                                                                                                                                                                    GH-70228
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A MEMBER OF IMMUNOGLOBULIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                  DB 3; Length 195;
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LENGTH: 195
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                                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 602016:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/300,985A CURRENT FILING DATE: 1999-04-28 EARLIER APPLICATION NUMBER: US 08/955,937 EARLIER FILING DATE: 1997-10-22
                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EARLIER FILING DATE: 1997-08-19
NUMBER OF SEQ ID NOS: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: GH-70228-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: US 60/056,152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: PIGR-1, A MEMBER OF IMMUNOGLOBULIN GENE TITLE OF INVENTION: SUPERFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: SWEET, RAYMOND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: UNSURE LOCATION: (122)(
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
                                                                       COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                            ZIP: 19482
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                              APPLICANT: WU, SHUJIAN
APPLICANT: SWEET, RAYMOND
APPLICANT: TRUNEH, ALEMSEGED
TITLE OF INVENTION: PIGR-1, I
TITLE OF INVENTION: GENE SUPH
                                               APPLICATION NUMBER: US/0 FILING DATE: 17-OCT-1997
                                  CLASSIFICATION: 435
                                                                                                                                                                                                                              STREET: P.O. BOX 91
CITY: VALLEY FORGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
nes 5; Conserv
                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                    STATE:
APPLICATION NUMBER:
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5. 6232441
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O. BOX 980
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65.4%; 55.6%;

Score 34; Pred. No. Mismatches

4;

Length 195; Indels

0,

Gaps

0

PIGR-1, A MEMBER OF IMMUNOGLOBULIN GENE SUPERFAMILY

US/08/955,937A

60/056,152

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GENERAL INFORMATION.

APPLICANT: WU, SHUJIAN
APPLICANT: SWEET, RAYMOND W.
APPLICANT: TRUNEH, ALEMSEGED
APPLICANT: TRUNEH, ALEMSEGED
APPLICANT: HURLE, MARK ROBERT
TITLE OF INVENTION: SUPERFAMILY
FILE REFERENCE: GH-70228-1
CURRENT APPLICATION NUMBER: US/09/300,985A
CURRENT FILING DATE: 1999-04-28
EARLIER APPLICATION NUMBER: US 60/955,937
EARLIER APPLICATION NUMBER: US 60/056,152
EARLIER APPLICATION NUMBER: US 60/056,152
EARLIER FILING DATE: 1997-10-22
EARLIER FILING DATE: 1997-08-19
NUMBER OF SEQ ID NOS: 14
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 201
TYPE: PRT
ORGANISM: HOMO SAPIENS
US-09-300-985-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
LENGTH: 201 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-955-937A-2
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Search completed: July 11, 2003, 12:02:04 Job time: 2.60915 secs
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 65.4%;
Best Local Similarity 55.6%;
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: PRESTIA, PAUL F
REGISTRATION NUMBER: 23,031
REFERENCE/DOCKET NUMBER: GH-70228
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-407-0700
TELEPAX: 610-407-0701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 19-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: PRESTIA, PAUL F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 |: ||:|
31 SLTVQCHYK 39
                                                                         31 SLTVQCHYK 39
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                                                                                                                                              Score 34; DB 4; Length 201; pred. No. 32; Mismatches 2; Indels
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Result
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Perfect score:
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Maximum DB seq
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1: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep: *

2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep: *

3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep: *

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep: *

5: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep: *

6: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep: *

7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep: *

9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep: *

9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep: *

10: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep: *

11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep: *

12: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep: *

13: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep: *

14: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep: *

14: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep: *
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US-10-175-738-608
US-10-176-757-608
US-10-176-913-608
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US-10-180-552-608
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US-09-764-881-113
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US-09-140-719-1
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Sequence 1, Appli
Sequence 34, Appl
Sequence 34, Appl
Sequence 31, Appl
Sequence 616, App
Sequence 618, App
Sequence 608, App
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US-10-091-442-1
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Patent No. US20020164711A1
GENERAL INFORMATION:
APPLICANT: TSUJIMOTO, Masafu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC - DOS/MS-DOS
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
CLASSIFICATION DATA:
APPLICATION NUMBER: US/09/140,719
PRIOR APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US/09/140,719
APPLICATION NUMBER: US/09/140,719
APPLICATION NUMBER: US/09/140,719
APPLICATION NUMBER: US/09/140,719
APPLICATION NUMBER: US/08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067739
                                                                                                                                                                                                                   STREET: P.O. Box 1404
CITY: Alexandria
STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                     KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. US20020164711Alomi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Burns, Doane,
      APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TSUJIMOTO, Masafumi
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ISHIDA, No. US20020164711A1uhiro
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NAKAZATO, Hiroshi
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US-10-174-588-608
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US-10-175-740-608
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US-10-176-488-608
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US-10-176-987-608
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US-10-174-586-608
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US-10-176-481-608
US-10-176-487-608
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1 Patent No.
                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
                                                                                PRIOR APPLICATION DATA:
                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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                                        FILING DATE: 17-JUL-
PRIOR APPLICATION DATA:
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 34
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                                                       APPLICATION NUMBER: JP 4 FILING DATE: 17-JUL-1992
                                                                                              APPLICATION NUMBER: US 0: FILING DATE: 14-JUL-1993
                FILING DATE:
                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                      FILING DATE:
                            APPLICATION NUMBER:
                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                             CITY: Alexandria
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , Application US/09140719
US20010026931A1
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                                                                                                                                                                                                                                                                                                                                                 Virginia
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                                                                                                                                                                                                                                                                                                                                                                          E: Burns, Doane,
P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                  United States
                                                                                                                                                                                                                                                                                                                                                                                                                                            KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. US20010026931A1omi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISHIDA,
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NAKAZATO, Hiroshi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUJIMOTO, Masafumi
                04-MAR-1993
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                                                                                                                                                                                                     08-AUG-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.
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                                                                      JP 4-212305
                                                                                                                                                           US 08/474,661
                                                                                                               US 08/091,028
                          JP 6-067339
                                                                                                                                                                                                               US/09/140,719
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
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Pred. No.
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US-10-091-442-34
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Best Local
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: si
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                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA RELEASE #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                TELECOMMUNICATION INFORMATION
                                                                                     FILING DATE: 04-MAR-19 ATTORNEY/AGENT INFORMATION:
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YAMAGUCHI, NO: US20020164711A1om1
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                            NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                       APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
                                                                                                                                                                        FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
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STATE: Virginia
 TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: United States ZIP: 22313-1404
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llarity 100.0%;
Conservative (
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TSUROUOKA, No. US20020164711A1uo
NAKAZATO, Hiroshi
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ISHIDA, No. US20020164711Aluhiro
(703)
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Pred. No.
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SEQUENCE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: 34: US-10-091-442-34
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PRIOR APPLICATION NUMBER: US 08/474,661
APPLICATION NUMBER: US 08/474,661
FILLING DATE: 07-JUN-1995
PRIOR APPLICATION NUMBER: US 08/091,028
FILLING DATE: 14-JUL-1993
PRIOR APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                   TELEFAX: (703) 836-2021 INFORMATION FOR SEQ ID NO:
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                               REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                                                       APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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nes 9; Conserv
                                                                                                                       NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
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YAMAICHI, KOZO
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NAKAZATO, Hiroshi
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                                                                      (703) 836-6620
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Pred. No. 0.09;
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US-09-764-881-113
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                                                                                            US-09-764-853-616
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US-09-764-853-616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-764-881-113
                                                                                                                                                                SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 616
LENGTH: 90
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                     Sequence 616, Application US/09764853 Patent No. US20020090672A1 GENERAL INFORMATION:
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                                              Query Match
Best Local :
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Best Local
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                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/764,853
CURRENT FILING DATE: 2001-01-17
                                                                                                                                                                                                                                                                                                          APPLICANT: Rosen et al. TITLE OF INVENTION: Nucleic Acids, Proteins, and FILE REFERENCE: PJZ06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/764,881
CURRENT FILING DATE: 2001-01-17
Prior application data removed - refer to PALM or file wrapper
NUMBER OF SEQ ID NOS: 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Rosen et al. TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PT207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 90
TYPE: PRT
ORGANISM: Homo:
                                                                                                                                                                                                                                             Prior application data removed - consult PALM NUMBER OF SEQ ID NOS: 939
                                                                         FEATURE:
NAME/KEY: SITE
LOCATION: (20)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: (20)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
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NAME/KEY: SITE
                              Local Similarity 77.8 hes 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity hes 7; Conserv
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77.8%;
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                                               Score 35;
Pred. No.
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Pred. No. 0.09;
                               Mismatches
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                                                            Length 90;
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RESULT 7 US-10-174-590-608

Publication No.

Application US/10174590

US20030008352A1

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SETINCVLK 77

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APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND

TITLE OF INVENTION: ACIDS ENCODING THE SAME

FILE REFERENCE: P3430R1C42

CURRENT APPLICATION NUMBER: US/10/174,590

CURRENT APPLICATION NUMBER: US/10/174,590

CURRENT FILING DATE: 2002-06-18

Prior application removed - See File Wrapper or Palm

NUMBER OF SEQ ID NOS: 612

SEQ ID NO 608

LENGTH: 201

TYPE: PRT

CORGANISM: Homo Sapien
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                                                     ; ORGANISM: Homo Sapien US-10-176-758-608
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                                                                                                   Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 608
LENGTH: 201
 Query Match
Best Local Similarity
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Best Local
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APPLICANT:
APPLICANT:
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APPLICANT: Zhang,Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C104
CURRENT APPLICATION NUMBER: US/10/176,758
CURRENT FILING DATE: 2002-06-21
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                                                                                      TYPE: PRT
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Lication No.
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nes 5; Conserv
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Godowski, Paul J.
Gurney, Austin L.
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Godowski, Paul ;
                                                                                                                                                                                                                                                                                           Smith, Victoria Watanabe, Colin K.
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65.4%;
55.6%;
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55.6%;
 Score 34;
Pred. No.
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Pred. No. 90;
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                 9;
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                 Length 201;
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US-10-173-706-608
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ORGANISM: Homo Sapien
JS-10-173-706-608
                          Prior Application removed
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 608
LENGTH: 201
TYPE: PRT
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NUMBER OF SEQ ID NOS: 612
SEQ ID NO 608
LENGTH: 201
TYPE: PRT
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GENERAL INFORMATION
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Best Local Similarity
Matches 5; Conserv
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CURRENT FILING DATE: 2002-06-17
                                                                                                                                       TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
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APPLICANT:
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CURRENT FILING DATE: 2002-06-19
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Godowski, Paul J.
Gurney, Austin L.
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                                                                                                                                                                                                                                            Smith, Victoria
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Goddard, Audrey
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    See File Wrapper or

    See File Wrapper or Palm

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Pred. No.
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Gaps

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; SEQ ID NO 608
; LENGTH: 201
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-175-738-608
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Best Local Similarity
Thes 5; Conserve
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   NUMBER OF SEC
SEQ ID NO 608
LENGTH: 201
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Best Local Similarity 55.6%;
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                     Publication No.
                                                        APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C60
CURRENT APPLICATION NUMBER: US/10/175,752
CURRENT FILING DATE: 2002-06-19
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CURRENT APPLICATION NUMBER: US/10/175,738

CURRENT FILING DATE: 2002-06-19
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                               Prior Application removed - See File Wrapper or Palm NUMBER OF SEQ ID NOS: 612
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NUMBER OF SEQ ID NOS: 612
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Godowski, Paul J.
Gurney, Austin L.
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b. US20030022294A1
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Pred. No.
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US-10-176-482-608
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US-10-175-752-608
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CURRENT FILING DATE: 2002-06-20
Prior Application removed - See File Wrap;
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 608
LENGTH: 201
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Best Local
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Publication No.
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TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C70
                                             APPLICANT: Zhang; Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C86
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              CURRENT APPLICATION NUMBER: US/10/176,757
CURRENT FILING DATE: 2002-06-20
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Godowski, Paul J.
Gurney, Austin L.
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Watanabe, Colin K.
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5. US20030022297A1
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b. US20030022296A1
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See File Wrapper or Palm
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Pred. No.
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APPLICANT: Watanabe, COLLIN.

APPLICANT: Wood, William I.

APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME

FILE REFERENCE: P3430R1C66

CURRENT FILING DATE: 2002-06-02

Prior Application removed - See file Wrapper or Palm

NUMBER OF SEQ ID NOS: 612

SEQ ID NO 608

LENGTH: 201

TYPE: PRT

ORGANISM: Homo Sapien

US-10-176-913-608

65.4%; Score 34; DB 9; Length 201;
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; SEQ ID NO 608

; LENGTH: 201

; TYPE: PRT

; ORGANISM: Homo Sapien

US-10-176-757-608
Search completed: July 11, 2003, 12:37:31 Job time : 3.63825 secs
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US-10-176-913-608
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APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gorney, Austin L.
APPLICANT: Pan, James
APPLICANT: Smith, Victoria
                                                                                                                                           Query Match 65.4%;
Best Local Similarity 55.6%;
Matches 5; Conservative
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Best Local Similarity 55.6%;
Matches 5; Conservative
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31 SLTVQCHYK 39
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31 SLTVQCHYK 39
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Smith, Victoria
Watanabe, Colin K.
Wood, William I.
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Title:
Perfect score:
Sequence:
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Gapop 10.0 , Gapext 0.5
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52
                                                                                                                                                                      July 11, 2003, 11:45:06; Search time 1.81497 Seconds (without alignments) 476.708 Million cell updates/sec
                          283224 seqs, 96134422 residues
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283224
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Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	₅	4	w	N	1	: : 3	Result
34	34	34	34	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	36	37	37	37	37	91006	
65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	•	69.2	۲.	۲.	71.2	71.2	Match	
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primosomal replica		primosomal protein	probable periplasm	conserved hypothet	hypothetical prote	class II histocomp	2			rearranged T-cell	rearranged T-cell	probable hexose tr	genome polyprotein	hypothetical prote	.0	CD:		hypothetical prote	ï	3		Ly-49G.2 antigen -	hypothetical prote	probable finger pr	probable membrane	adenosine receptor	_	probable G protein	pescription	

ALIGNMENTS

RESULT 2 A46152 A3 adenosine receptor - rat C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) R;Zhou, O;Y; Li, C; Olah, M.E; Johnson, R.A.; Stiles, G.L.; Civelli, O. Proc. Natl. Acad. Sci. U.S.A. 89, 7432-7436, 1992 A;Title: Molecular cloning and characterization of an adenosine receptor: the A3 A;Reference number: A46152; MUID:92366475; PMID:1323836 A;Accession: A46152 A;Accession: A46152 A;Accession: A46152 A;Rote: Telerences: MENA A;Residues: 1-320 <zho> A;Cross-references: GB:M94152; NID:9202724; PIDN:AAA40680.1; PID:9460332 A;Experimental source: brain A;Note: sequence inconsistent with the nucleotide translation</zho>	Query Match 71.2%; Score 37; DB 2; Length 320; Best Local Similarity 55.6%; Pred. No. 25; Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0; Qy 1 SETINCHFK 9 :: : Db 163 SSTLSCHFR 171	C; Superfamily: adenosine receptor Al C; Keywords: G protein-coupled receptor; glycoprotein; lipoprotein; thiolester bond; F; 17-39/Domain: transmembrane #status predicted <tm1> F; 51-74/Domain: transmembrane #status predicted <tm2> F; 84-108/Domain: transmembrane #status predicted <tm4> F; 129-150/Domain: transmembrane #status predicted <tm5> F; 180-200/Domain: transmembrane #status predicted <tm5> F; 234-257/Domain: transmembrane #status predicted <tm6> F; 234-257/Domain: transmembrane #status predicted <tm7> F; 342-257/Domain: transmembrane #status predicted <tm6> F; 343-257/Domain: transmembrane #status predicted <tm7> F; 342-162,213/Binding site: carbohydrate (Asn) (covalent) #status predicted F; 402/Binding site: palmitate (Cys) (covalent) #status predicted</tm7></tm6></tm7></tm6></tm5></tm5></tm4></tm2></tm1>	RESULT 1 S17.177 probable G protein-coupled receptor - rat C; Species: Rattus norvegicus (Norway rat) C; Species: Rattus norvegicus (Norway rat) C; Date: 04-Dec-1992 #sequence_revision 04-Dec-1992 #text_change 29-Sep-1999 C; Accession: S17177 R; Meyerhof, W; Mueller-Brechlin, R.; Richter, D. FEBS Lett. 284, 155-160, 1991 A; Title: Molecular cloning of a novel putative G-protein coupled receptor expressed A; Reference number: S17177; MUID:91285122; PMID:1647979 A; Accession: S17177 A; Molecule type: mRNA A; Residues: 1-320 < MEN> A; Cross_references: EMBL:X59249; NID:956307; PIDN:CAA41937.1; PID:956308
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A;Accession. ...
A;Molecule type: DNA
A;Residues: 1-1030 <ZUW>
A;Cross-references: EMBL:274831; NID:g1419931;
A;Cross-references: Strain S288C
                                          A;Cross-references: SGD:S0005449
A;Map position: 15L
C;Superfamily: unassigned GAL4-type zinc cluster proteins; GAL4
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S57380
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A;Title: cDNA cloning and characterization A;Reference number: $68678; MUID:96196578; A;Accession: $68678
 C;Keywords: transmembrane protein
F;131-171/Domain: GAL4 zinc binuclear cluster homology <GAL4>
F;762-778/Domain: transmembrane #status predicted <TMM>
                                                                                                                                                                                                                                                                                                                                                         R;Zumstein, E.; Pearson, B.M.; Kalogeropoulos, A.; Schweizer, Yeast 11, 975-986, 1995
A;Title: A 29.425 kb segment on the left arm of yeast chromos A;Reference number: S57374; MUID:96021609; PMID:8533473
A;Accession: S57380
                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Saccharomyces cerevisiae
C;Date: 28-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 19-Apr-2002
C;Accession: S57380; S66783; S50416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      probable membrane protein YOL089c - yeast (Saccharomyces cerevisiae)
N;Alternate names: hypothetical protein 00938
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C; Keywords: alternative splicing
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C;Date: 15-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 20-Jun-2000
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                                                                                                           A;Gene: SGD:HAL9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: EMBL:X93219; NID:g1297000; PIDN:CAA63702.1; PID:g1297001
C;Superfamily: adenosine receptor Al
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A; Residues: 1-337 <SAJ>
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C;Species: Rattus sp. (ra
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5; Conser
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Pred. No.
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26;
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                                                                                                                                                                                                                                                                                   PID: 9600469
                                                                                                                                                            PID:e251886;
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RESULT 6
B64028
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                                                                                                                                                                                                                                                                                                              R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman, D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M. Science 269, 496-512, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Map position: 11R
G;Superfamily: unassigned GAL4-type zinc cluster proteins; GAL4 zinc binuclear cluste C;Superfamily: unassigned GAL4-type zinc cluster proteins; GAL4 zinc binuclear cluster protein; zinc finger F;14-52/Domain: GAL4 zinc binuclear cluster homology <GAL4>
F;19-47/Region: zinc finger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Accession: S38140 R; van Vliet-Reedijk, J.C.; Planta, submitted to the Protein Sequence
DЬ
                                 δõ
                                                                                                                                              C; Superfamily: Haemophilus influenzae hypothetical protein
                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-118 <TIGR>
                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothetical protein HI1406 - Haemophilus influenzae (strain Rd C;Species: Haemophilus influenzae
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A;Map position: 11R
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                                                                                                                                                                   A;Cross-references: GB:U32820; GB:L42023; NID:g1574231; PIDN:AAC23056.1; PID:g1574244
                                                                                                                                                                                                                        A; Status: nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                            C; Accession: B64028
                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Haemophilus influenzae
C;Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 08-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Experimental source: strain S288C
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62.5%;
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Pred. No. 69;
2; Mismatches
                                                                                                         Score 35;
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Pred. No.
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RESULT 7 I49054 Ly-49G.2 antigen C;Species: Mus mu:

musculus ı

(house mouse)

mouse

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C:Species: Mus sp. (mouse)
C;Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 19-May-2000
C;Accession: I55686
R:Mason, L.H.; Ortaldo, J.R.; Young, H.A.; Kumar, V.; Bennett, M.; Anderson, J. Exp. Med. 182, 293-303, 1995
A:Title: Cloning and functional characteristics of murine large granular lymp A:Reference number: I55686; MUID:95355829; PMID:7629495
A:Accession: I55686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ly-49G.2 antigen - mouse

N; Alternate names: Ly-49E
C; Species: Mus musculus (house mouse)
C; Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change of Accession: I49053; I491L5
R; Smith, H.R.; Karlhofer, F.M.; Yokoyama, W.M.
J. Immunol. 153, 1068-1079, 1994
A; Title: Ly-49 multigene family expressed by IL-2-activated NK of A; Reference number: I49049; MUID:94300068; PMID:8027540
A; Accession: I49053
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C;Superfamily: natural killer cell receptor Pl; C-type lectin homology
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J. Exp. Med. 180, 2287-2295, 1994
A:Title: Expression of different members of the Ly-49 gene family defines careference number: I49114; MUID:95053763; PMID:7964501
A:Accession: I49115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-43,'Q',45-267
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A; Residues: 1-267 < RES>
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A; Title: Ly-49 multigene famil
A; Status: preliminary; A; Molecule type: mRNA
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                      translated from
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Pred. No.
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Pred. No.
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                      GB/EMBL/DDBJ
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                                                                                      granular lymphocyte-1:
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RESULT 12 F95058

hypothetical protein SP0505 [imported] C; Species: Streptococcus pneumoniae

Streptococcus

pneumoniae

(strain

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В
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A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-280 <RES>
A;Cross-references: EMBL:U10093; NID:9533493; PIDN:AAA50221.1; PID:9533494
C;Superfamily: natural killer cell receptor P1; C-type lectin homology
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밁
                            γ
                                                                                                                           A; Gene:
                                                                                                                                          C; Genetics
                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-280 <STO>
                                                                                                                                                                                                                                    A; Reference number: A84930; A; Accession: D84968
                                                                                                                                                                                                                                                      A; Title: Genome sequence of the endocellular bacterial symbiont of aphids Buchnera A; Reference number: A84930; MUID:20445173; PMID:10993077
                                                                                                                                                                                                                                                                                                                  C; Accession: D84968
                                                                                                                                                                                                                                                                                                                                 hypothetical protein [imported] - Buchnera sp. (str
C;Species: Buchnera sp.
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Title: Ly-49 multigene family expressed by IL-2-activated A;Reference number: I49049; MUID:94300068; PMID:8027540 A;Accession: I49052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R; Smith, H.R.; Karlhofer, F.M.; Yokoyama, W.M. J. Immunol. 153, 1068-1079, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Accession: I49052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Mus musculus (house mouse)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 19-May-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
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A;Gene: LGL-1
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A;Cross-references: GB:S78689; NID:g1041888; PIDN:AAC60707.1; PID:g1041889
                                                                                                                                                         A; Experimental source: strain APS
                                                                                                                                                                          A;Cross-references: GB:AP000398; GSPDB:GN00144
                                                                                                                                                                                                                       A; Status: preliminary
                                                                                                                                                                                                                                                                                    R;Shigenobu, S.; Watanabe, H.;
Nature 407, 81-86, 2000
                                                                                                                                                                                                                                                                                                                                                                                     D84968
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Best Local s
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247
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5; Conserv
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SRFINCHE
                              SETINCHE 8
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83.3%;
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83.3%;
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Pred. No.
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Pred.
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No.
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qe

C; Date: 03-A: C; Accession:

Holt, I.E. White,

Paulsen, I.T.; , O.; Salzberg,

Eisen, J.A.; Read, T.D.; Po S.L.; Lewis, M.R.; Radune,

Peterson, S.; нет e, D.; Holtzapple,

polyp

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RESULT 14
VCLJG2
env polyprotein precursor - human immunodeficiency virus type
env polyprotein grecursor - human immunodeficiency virus type
N; Alternate names: coat polyprotein
C; Species: human immunodeficiency virus type 2, HIV-2
C; Species: human immunodeficiency virus type 2, HIV-2
C; Species: human immunodeficiency virus type 2, HIV-2
C; Species: human immunodeficiency virus type 2, HIV-2
C; Species: human immunodeficiency virus type 30, HIV-2
C; Species: human immunodeficiency virus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C.Accession: H9792/
R;Hoskins, J.A.; Alborn Jr., W.; /
e, R.; LeBlanc, D.J.; Lee, L.N.;
e, R.; LeBlanc, Minkler, M.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J. Bacteriol. 183, 5709-5717, 2001

A; Authors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, F. A; Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6. A; Reference number: A97872; MUID:21429245; PMID:11544234

A; Accession: H97927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      type 1 site-specific deoxyribonuclease (EC 3.1.21.3) - Streptococcus pneumo C:Species: Streptococcus pneumoniae C:Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 27-Nov-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: hsd
C; Keywords:
                                                                                                             R;Guyader, M.; Emerman, M.;
Nature 326, 662-669, 1987
                                                                                                                                               C; Accession: C26262
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A; Molecule type:
A; Residues: 1-858
                                                      A; Contents:
                                                                    A; Title: Genome organization and transactivation of the A; Reference number: A26262; MUID:87173056; PMID:3031510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-522 <KU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary
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A; Residues: 1-426 < KUR>
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A;Title: Complete Genome Sequence of a virulent
A;Reference number: A95000; MUID:21357209; PMID:
A;Accession: F95058
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                                 proviral DNA
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75.0%;
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75.0%;
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Pred. No. 89;
0; Mismatches
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Lefkowitz, E.J.; Lu, J
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J.; Matsushima, P.; McAhren,
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                                                                                          human
                                                                                        immuno-deficiency
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time

completed: July 11, me : 2.91497 secs

2003,

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A;Status, France, A;Status, France, DNA
A;Molecule type: DNA
A;Residues: 1-1173 <DAN>
A;Residues: 1-1173 <DAN>
A;Cross-references: EMBL:U88311; PIDN:AAB42348.1; GSPDB:GN00019;
A;Cross-references: Strain Bristol N2; clone C10H11
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A; Gene: env
C; Superfamily: type E retrovirus env polyprotein
C; Keywords: AIDS; capsid protein; coat protein; glycoprotein; immunodefic: F;1-17/Domain: signal sequence #status predicted <SIG>F;18-501/Product: env polyprotein #status predicted dMAT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #status predicted <EXT>F;18-501/Product: exterior membrane glycoprotein #st
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A;Introns: 23/3; 51/1; 104/3; 343/1; 478/2; 868/3; 891/3; 970/3;
C;Superfamily: hypothetical protein C10H11.9; protein kinase homo
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C; Date: 15-Oct-1999 #sequence_rev
C; Accession: T25539
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   GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.
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CASR_BOVIN
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RLPA_RICPR
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RL25_HELDJ
14_P_HUMAN
PLL_SHEEP
D250_ASFB7
BHMT_PIG
SCF_CHICK
Y361_HAEIN
RLPA_RICCN
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Result

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1 BHMT_HUMAN Q93088 1 BHMT_MOUSE 035,490 1 BHMT_MOUSE 099171 1 NU5C_TECST Q9t1c2 1 PEPX_LACLA Q9ce01 1 PEPX_LACLC P23631 1 POLS_EEVVM P36331 1 VIT6_OSCBR Q94637 1 WY15_MOUSE Q94637 1 LEG2_MOUSE Q94057 1 LEG2_RAT Q9cqw5												
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homo sapien mus musculu rattus norv tecoma stan lactococcus lactococcus venezuelan oscheius br mus musculu saccharomyc mus musculu rattus norv												

ALIGNMENTS

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; D88575; BAA31232.1; ; AF027866; AAC64506.1; ; P05619; IHLE. w; HGNC:13902; SERPINB7. 603357; 1PTO; IPR000215; SERPIN; 1. ; PF00079; SERPIN; 1. ITE; PS00093; SERPIN; 1.	SWISS-PROT entry is copyright. It is produced through a collaboratio een the Swiss Institute of Bioinformatics and the EMBL outstation European Bioinformatics Institute. There are no restrictions on it by non-profit institutions as long as its content is in no was fied and this statement is not removed. Usage by and for commercia ties requires a license agreement (See http://www.isb-slb.ch/announce and an email to license@isb-slb.ch).	J. Clin. Invest. 102:828-836(1998). J. Clin. Invest. 102:828-836(1998). -: FUNCTION: Might function as an inhibitor of Lys-specific proteases. Might influence the maturation of megakaryocytes via its action as a scrpin. -: SUBCELLULAR LOCATION: Cytoplasmic (By similarity). -: TISSUE SPECIFICITY: Predominantly expressed in mesangial cells. -: SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.	SEQUENCE FROM N.A. TISSUE-Mesangial cells; MEDLINE-98376492; PubMed-9710452; Miyata T., Nangaku M., Suzuki D., Inagi R., Uragami K., Sakai H., Okubo K., Kurokawa K.; "A mesangium-predominant gene, megsin, is a new serpin upregulated in TAA meshorathy "	SEQUENCE FROM N.A. MEDLIND=97326116; PubMed=9182567; MEDLIND=97326116; PubMed=9182567; TSUJimOto M., TSUTUOKA N., IShida N., Kurihara T., Iwasa F., TSUJimOto M., TSUTUOKA N., Katsuragi N., Adachi M., Yamashiro K., Rogi T., Kodama S., Katsuragi N., Adachi M., Miura K., Katayama T., Nakao M., Yamaichi K., Hashino J., Haruyama M., Miura K., Nakanishi T., Nakazato H., Teramura M., Mizoguchi H., Yamaguchi N.; "Purification, cDNA cloning, and Characterization of a new serpin with megakaryocyte maturation activity."; J. Biol. Chem. 272:15373-15380(1997).	B7). ordai imate	RESULT 1 SPB7_HUMAN ID SDB7_HUMAN STANDARD; PRT; 380 AA. AC 075635; DT 15-JUN-2002 (Rel. 41, Created) DT 15-JUN-2002 (Rel. 41, Last sequence update) DT 15-JUN-2002 (Rel. 41, Last annotation update)

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RESULT 2

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                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA3R_RAT STANDARD; PRT; 320 AA
P28647; Q63792;
01-DEC-1992 (Rel. 24, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation updat
EMBL; X59249; CAA41937.1;
EMBL; M94152; AAA40680.1;
EMBL; X93219; CAA63702.1;
PIR; S17177; S17177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=96196578; PubMed=8612733;
Sajjadi F.G., Boyle D.L., Domingo R.C., Firestein G.S.;
Sajjadi F.G., Boyle D.L., Domingo R.C., Firestein G.S.;
"CDNA cloning and characterization of A31, an alternatively
rat A3 adenosine receptor variant.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A3 adenosine receptor. Natl. Acad. Sci.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhou Q.Y., Li C.Y., Olan M.E., Zhou Q.Y., Li C.Y., Olan M.E., William Molecular cloning and characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-Brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Meyerhof W., Mueller-Brechlin R., Richt "Molecular cloning of a novel putative expressed during rat spermiogenesis."; FEBS Lett. 284:155-160(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=Wistar; TISSUE=Testis; MEDLINE=91285122; PubMed=1647979;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-92366475;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., AND CHARACTERIZATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
MCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Adenosine A3 receptor (TGPCR1).
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ACT_SITE 347 348 REACTIVE BOND (BY SIMILARITY).

SEQUENCE 380 AA; 42904 MW; 9A2CDB6C63CFF605 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION: RECEPTOR FOR ADENOSINE. THE ACTIVITY OF IS MEDIATED BY G PROTEINS WHICH INHIBITS ADENYLYL POSSIBLE ROLE IN REPRODUCTION.
SUBCELLULAR LOCATION: Integral membrane protein.
ALTERNATIVE PRODUCTS: TWO ISOFORMS ARE PRODUCED BY
                                                                                                                                                                                                                                                                                                                                                        DEVELOPMENTAL STAGE: EXPRESSED DURING SPERMIGGENESIS.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE SPECIFICITY: TESTIS, SPERMATIDS BUT NOT IN SPERM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lett. 382:125-129(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188
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                                                                                                                                                                                                                                                                                                                                                                                    TESTIS, PARTICULARLY IN SPERMATOCYTES AND N SPERMATOGONIA. LOW LEVELS IN THE BRAIN. EXPRESSED DURING SPERMIOGENESIS.
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erization of an
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RESULT 3
YK44_YEAST
ID4 YEAST
AC P36023
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DE interg
GN Saccha
OC Eukary
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Matches
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01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Putative 101.8 kDa transcriptional regulatory
intergenic region.
                                       van Vliet-Reédijk J.C., Planta R.J.; Submitted (MAR-1994) to the EMBL/GenBank/DDBJ databases.-i-SUBCELLULAR LOCATION: Nuclear (Probable).
-i-SIMILARITY: CONTAINS 1 ZN(2)-CYS(6), FUNGAL-TYPE BIN CLUSTER DOMAIN.
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CONFLICT
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                                                                                                                      Eukaryota; Fungi; /
Saccharomycetales;
NCBI_TaxID=4932;
                                                                                                                               Saccharomyces cerevisiae (Baker's yeas:
Eukaryota; Fungi; Ascomycota; Saccharon
Saccharomycetales; Saccharomycetaceae;
                                                                                          STRAIN-S288c;
                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                  YK44_YEAST
                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
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HSSP;
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proSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Transmembrane;
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; P29274; 1MMH.
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5; Conserv
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cota; Saccharomycotina; Saccharomycetes;
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I -> V (IN REF. 1).
I -> V (IN REF. 3).
VSLEVQMHFY -> SAWRSRCTSM (IN RI
F -> L (IN REF. 3).
S -> F (IN REF. 1).
I -> N (IN REF. 1).
                                                                                                                                                                                                                                                                                                                                 Score 37;
Pred. No.
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5 (POTENTIAL)
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N-LINKED (GLCNAC. . .)
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PALMITATE (POTENTIAL)
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6 (POTENTIAL
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                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-Rd / KW20 / ATCC 51907;
MEDLINE-9535030; Pubmed-7542800;
                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR001138; Fungi_TrN.
Pfam; PF00172; Zn_clus; 1.
SMART; SM00066; GAL4; 1.
                                     Hypothetical SEQUENCE 1
                                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical HI1406.
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P44181;
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PROSITE; PS0046; ZN2_CY6_FUNGAL_2; 1.
PROSITE; PS50048; ZN2_CY6_FUNGAL_2; 1.
Hypothetical protein; Transcription regulation; DNA-binding; Hypothetical protein; Transcription regulation; DNA-binding.
NUCLEAR PROTEIN; Metal-binding.
DNA_BIND 18 47 ZN(2)-CYS(6), FUNGAL-TYPE.
DNA_BIND 18 47 ZN(2)-CYS(6), FUNGAL-TYPE.
STOTIENCE 863 AA; 101824 MW; B140465B405FAF84 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                        EMBL; U32820;
TIGR; HI1406;
                                                                                                                                                                                                                                                                                                                                                                                    Bacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; Z28289; CAA82143.1; -. PIR; S38140; S38140.
                                                                                                                                                                                Science 269:496-512(1995).
                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=727;
                                                                                                                                                                                                                                                                                                                                                                                                 Haemophilus influenzae
                                                                                                                                                                                                      Whole-genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; P12351; 1HWT.
S0001772; YKR064W.
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5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                    Proteobacteria;
                                    118 AA; 1:
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                                                                                                                                                                                                                                                                                                                                                                                                                   protein HI1406
                                                                                                                                                                                                      random sequencing and assembly of Haemophilus influenzae
                                                                     AAC23056.1;
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                                    1; Complete proteome.
13325 MW; C1CAF33E6CBB3452 CRC64;
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    66
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Pred. No.
   Score
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            Length 118;
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Matches
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01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Killer cell lectin-like receptor 7 (T-cell surface glycoprotein LY-49G) (LY49-G antigen).
KLRA7 OR LY49-G OR LY49-G OR LY49-G OR LY49G4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -i- FÜNCTION: RECEPTOR ON NATURAL KILLER (NK) CELLS FOR CLASS-
-i- SUBGUNT: HOMODIMER; DISULFIDE-LINKED.
-i- SUBCELLULAR LOCATION: Type I I membrane protein.
-i- ALTERNATIVE PRODUCTS: 3 ISOFORMS; LY-49G.1 (SHOWN HERE),
49G.2 AND LY-49G.3; ARE PRODUCED BY ALTERNATIVE SPLICING
-i- SIMILARITY: CONTAINS 1 C-TYPE LECTIN FAMILY DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brennan J., Mager D., Jefferles W., Takei F.;
"Expression of different members of the Ly-49 distinct natural killer cell subsets and cell J. Exp. Med. 180:2287-2295(1994).
                                                                                                                                                                                                                                     PROSITE; PS00615; C_TYPE_LECTIN_1; FALSE_NEG.
PROSITE; PS50041; C_TYPE_LECTIN_2; 1.
T-cell; Glycoprotein; Antigen; Transmembrane; Cell adhesion;
                                                                                                                                                                                                                                                                                                  MGD; MGI:101901; Klra7.
MGD; MGI:101901; Klra7.
InterPro; IPR001304; Lectin_C.
Pfam; PF00059; lectin_C; 1.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U10093; AAA50221.1; -. EMBL; U10094; AAA50222.1; -. EMBL; U10095; AAA50223.1; -. EMBL; U12890; AAA58705.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entities requires a license agreement (See http://www.lsb-or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-94300068; pubMed-8027540;
Smith H.R.C., Karlhofer F.M., Yokoyama
"Ly-49 multigene family expressed by II
J. Immunol. 153:1068-1079(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                   Signal-anchor; Lectin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-95053763; PubMed-7964501;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-C57BL/6; TISSUE-Spleen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SWISS-PROT entry is copyright. It is produced through a ceen the Swiss Institute of Bioinformatics and the EMBL European Bioinformatics Institute. There are no restrict
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16-OCT-2001 (Rel. 40, Last sequence update)
15-UN-2002 (Rel. 41, Last annotation update)
Ribosomal RNA small subunit methyltransferase C (EC (guanine-N(2)-)-methyltransferase) (16S rRNA m2G1207 methyltransferase).
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CONFLICT
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InterPro; IPR002052; N6_Mtase.
InterPro; IPR000051; SAM_bind.
PROSITE; PS00092; N6_MTASE; UNKNOWN_1.
rRNA processing; Transferase; Methyltransferase; Complete SEQUENCE 338 AA; 39105 MW; E43516DDD22FA014 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Genome sequence of the endocellular bacterial symbiont of aphids Buchnera sp. APS.";
Nature 407:81-86(2000).
-!- FUNCTION: SPECIFICALLY METHYLATES THE GUANOSINE IN POSITION 1207
-!- FUNCTION: SPECIFICALLY METHYLATES THE GUANOSINE IN POSITION 1207
-!- CATALYTIC ACTIVITY: S-adenosyl-L-methionine + rRNA = S-adenosyl-L-methionine.
-!- SIMILARITY: BELONGS TO THE METHYLTRANSFERASE SUPERFAMILY. RSMC
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MEDLINE=20445173; PubMed=10993077;
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13-AUG-1987 (Rel. 05, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Envelope polyprotein GP160 precursor [Contains:
glycoprotein (GP120); Transmembrane alucania.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR000328; Env_GP41.
InterPro; IPR000777; GP120.
Pfam; PP005516; GP120; 1.
Pfam; PP00517; GP41; 1.
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EMBL; X05291; CAA28914.1; -.
PIR; C26262; VCLG2.
HIV; M15390; ENV$2ROD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency Viruses; Retroid viruse Viruses; Retroid viruse VICBI_TaxID=11720;
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Sonigo P.,
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                                                                      P56715;
P56715;
P56715;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Oxygen-regulated protein 1 (Retinitis pigmentosa (Retinitis pigmentosa 1 protein).
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P37800;
01-OCT-1994
01-OCT-1994
15-JUN-2002
                                                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as long modified and this statement is not removed entitles requires a license agreement (See or send an email to license@isb-sib.ch)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     viruses.";
virus Res. 27:119-131(1993).
-!- CATALYTIC ACTIVITY: N nucleoside triphosphate - N diphosphate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Accardi L., Gro M.C., di Bonito P., Giorgi C.;
"Toscana virus genomic L segment: molecular cloning,
and amino acid sequence in comparison with other nega
                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                     Transferase; Nucleotidyltransferase; RNA-directed RNA polymerase. SEQUENCE 2095 AA; 238885 MW; 22FF4DAD745583B7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-ISS. PHL. 3;
MEDLINE-93212587; PubMed-8460526;
 SEQUENCE FROM N.A.,
AND TYR-2033.
                                                                                                                                                         RP1_HUMAN
                                                                                                                                                                                                                                                                                                                            PIR; $29529; $29529
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                                NCBI_TaxID=9606;
                                                                Homo sapiens (Human)
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(Rel. 30, Last sequence update)
(Rel. 41, Last annotation update)
d RNA polymerase (EC 2.7.7.48) (L protein).
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/FTId=VAR_007810

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Retinitis PS50309; DC;

Polymorphism; Repeat.
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InterPro; IPR003533; DC Pfam; PF03607; DCX; 2: SMART; SM00537; DCX; 2:

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MIM; 180100;

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EMBL: AF143226; AAD44197.1; JC EMBL: AF143224; AAD44197.1; JC EMBL: AF143225; AAD44197.1; JC EMBL: AF143225; AAD44198.1; EMBL: AF143222; AAD44198.1; EMBL: AF143222; AAD46774.1; JC EMBL: AF152240; AAD46774.1; JC EMBL: AF152241; AAD46774.1; JC EMBL: AF152242; AAD46774.1; JC EMBL: AF152241; AAD46774.1; JC EMBL: AF152241; AAD46774.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AF14592; AAD46769.1; JC EMBL: AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD467699.1; AAD4
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Hum. Mol. Genet. 8:1541-1546(1999).
-i-FUNCTION: COULD HAVE A ROLE IN THE DIFFERENTIATION
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Guillonneau X., Piriev N.I., Danciger M., Kozak
Jacobson S.G., Farber D.B.;
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                                                                                                                                                                                                                                                                                                                                                              Genew;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISEASE: DEFECTS IN RPI CAUSE RETINITIS PIGMENTOSA FORM DISEASE CHARACTERIZED BY CONSTRICTION OF THE VISUAL FIEL BLINDNESS, AND FUNDUS CHANGES. THE DISEASE SEEMS TO BE A WITH TRUNCATED (STOP OR FRAMESHIFT MUTATIONS) FORMS OF 1
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TISSUE SPECIFICITY: EXPRESSED IN RETINA.
BRAIN, PLACENTA, LUNG, LIVER, SKELETAL M
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www-"http://www.sph.uth.tmc.edu/retnet/".
DATABASE: NAME-Mutations of the RP1 gene;
NOTE-Retina International's Scientific Newsletter;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WWW-"http://www.retina-international.com/sci-news/rplmut.htm".
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D HP27_TAMSI
D HP27_TAMSI
C Q06577;
C Q06577;
T 01-NOV-1995 (Rel. 32, Created)
T 01-NOV-1995 (Rel. 32, Last sequence update)
T 15-JUN-2002 (Rel. 41, Last annotation update)
E Hibernation-associated plasma protein HP-27 precursor (Hi specific blood complex, 27 kDa subunit).
S Tamias sibiricus (Siberian chipmunk) (Asian chipmunk).
S Tamias sibiricus (Siberian chipmunk) (Asian chipmunk).
C Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel Mammalia; Eutheria; Rodentia; Sciurognathi; Sciuridae; Sc
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-i- FUNCTION: PLASMA PROTEINS HP-20,
140 kDa COMPLEX VIA DISULFIDE BO
                                                InterPro; IPR001073; Clq.
InterPro; IPR000087; Collagen.
                                                                                                   EMBL; D12976; BAA02353.1; -.
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DEVELOPMENTAL STAGE: THE PROTEIN COMPLEX DISAPPEARS FROM THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBCELLULAR LOCATION: Extracellular
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71.4%;
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S -> P.
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W; 55AEDBEC43D6A507
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/FTId=VAR_007811.
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THE PLASMA AND ARE
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ae; Sciurinae;
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                                                                                       Pfam; PF00047; 1g; 1.
Pfam; PF00969; MHC_II_beta; 1.
Pfam; PF009328; MHC_II_beta; 1.
ProDom; PD000328; MGC1; 1.
SMART; SM00407; IGC1; 1.
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                                                                                                                                                                                  EMBL;
PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1991 (Rel.
01-NOV-1991 (Rel.
01-NOV-1991 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Signal;
SIGNAL
                                                                                                                                                                                                                          use by non-profit institutions as long modified and this statement is not removed entities requires a license agreement (See
                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the El the European Bioinformatics Institute. There are no rest
                                                                                                                                                                                                                                                                                                  beta chain sequences: comparison with mammalian beta chains expression in lymphoid organs."; EMBO J. 7:1031-1039(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P23068;
01-NOV-1991
                                                                                                                                                                                                                or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                  MEDIINE-88296406; PubMed-2841107;
Bourlet Y., Behar G., Guillemot F., Frechin N.,
Chausse A.M., Zoorob R., Auffray C.;
"Isolation of chicken major histocompatibility
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Class II histocompatibility antigen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHICK
DISULFID
                                                                                    PROSITE;
                                                                                                                                     Interpro; IPR003006; Ig_MHC.
Interpro; IPR003597; Ig_cl.
Interpro; IPR000353; MHC_II_beta
                                                                                                                                                                        HSSP; P01888;
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                                                                                                                                                                                 ; X07447; -; NOT_ANNOTATED_CDS.
S00475; HLCHBL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; PS01113; C10; 1.
Collagen; Glycoprotein; Plasma; Multigene family.
                                                                         Transmembrane;
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5; Conser
                                                                                    PS00290; IG_MHC; 1.
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20, Last sequence update;
20, Last annotation update;
20, Last annotation b-L beta
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71.4%;
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COLLAGEN-LIKE.
C1Q.
                               EXTRACELLULAR BETA-1.
EXTRACELLULAR BETA-2.
CONNECTING PEPTIDE.
CYTOPLASMIC
BY SIMILARIT
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R -> Q (IN REF. 2).
D2357086A088FA9E
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RESULT 12
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                                                                                                                     DISULFID CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
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01-OCT-1996 (Rel. 34, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; L20465;
EMBL; L12543;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLINE=94299155; PubMed-8026747;
Ajuh P.M., Egwang T.G.;
"Cloning of a cDNA encoding a put
receptor subunit of the human fil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Onchocercidae;
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                                                                                                                                                            TRANSMEM
                                                                                                                                                                                   DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR000188; GABAA_receptor.
InterPro; IPR001175; Neur_channel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    between
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                                                                                                                                                                                                                                                                                                    Multigene
                                                                                                                                                                                                                                                                                                                       Postsynaptic membrane;
                                                                                                                                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FUNCTION: AFTER BINDING ACETYLCHOLINE, EXTENSIVE CHANGE IN CONFORMATION THAT LEADS TO OPENING OF AN ION-CONDUCTING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBCELLULAR LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEMBRANE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               144:127-129(1994)
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Similarity
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PS00236; NEUROTR_ION_CHANNEL;
ptic membrane; Ionic channel; (
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5; Conservative
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231 AA;
  Conservative
                                                                                                                                                                                                                                                                                                                                                                            ; Neur_chan_LBD; 1
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AAA29415.1; -.
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Pred. No.
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N-LINKED (GLCNAC. . .) (POTENTIAL).
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Pred. No.
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BY SIMILARITY.
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Pred. No. 27 
Mismatches
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                                       VARIANT ADH ALA-127.

WEDLING=95179179; PUDMed=7874174;

POLIAK M.R., Brown E.M., Estep H.L.,

Hebert S.C., Seidman C.E., Seidman J.

"Autosomal dominant hypocalcaemia cau
                                                                                                                                                                                        pollak M.R., Brown E.M., Chou Y.-H.W., Hebert S. Steinmann B., Levi T., Seidman C.E., Seidman J.G "Mutations in the human Ca(2+)-sensing receptor hypocalciuric hypercalcemia and neonatal severe hyperparathyroidism."; Cell 75:1297-1303(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Expression of a calcium-sensing thyroid carcinoma cell line and i secretion.";
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"Molecular cloning of a putative Ca(2+)-sensing receptor
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mutation.";
Genet. 8:303-307(1994)
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Q16379; Q16108; Q16109;
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-Lorenz A., Holloschi A.,
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MEDLINE-97442275; PubMed-9298824; Ward B.K., Stuckey B C *
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MEDLINE=21603857; PubMed=11762699;
Nakayama T., Minato M., Nakagawa M., Soma M., Tobe H., Aoi |
Nakayama T., Minato M., Ozawa Y., Kanmatsuse K., Kokubun S.;
Kosuge K., Sato M., Ozawa Y., Kanmatsuse K., Kokubun S.;
"A novel.mutation in Ca2+ sensing receptor gene in familial
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MEDLINE-9524322; PubMed-7726161;
Chou Y.-H.M., Pollak M.R., Brandi M.L., Toss G., Arnqvist
Atkinson A.B., Papapoulos S.E., Marx S., Brown E.M., Seidm
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J. Clin. Endocrinol. Metab. 80:2594-2598(1995).
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VARIANTS FHH
LASEASE: DEFECTS IN CASR ARE AL HYPOCALCEMIA (ADH) IN WHICH THE CA(2+) LEVELS.
- DISEASE: DEFFOrm
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SUBECELULIAR LOCATION: Integral membrane protein.

ALTERNATIVE PRODUCTS: 2 isoforms; 1 (shown here) and 2; are produced by alternative splicing.

TISQUE SPECIFICITY: FOUND IN KIDNEY, BUT NOT IN BRAIN, LUNG, LIVER, HEART, SKELETAL MUSCLE, OR PLACENTA.

LIVER, HEART, SKELETAL MUSCLE, OR PLACENTA.

DISEASE: DEFECTS IN CASR ARE A CAUSE OF FAMILIAL HYDOCALCIURIC PRERCALCEMIA (FHH) AND NEONATAL SEVERE HYDERRARTHYROLDISM (NEUDEN).
                                                                                                                                                    CONTARST, NSHPT IS A RARE AUTOSOMAL RECESSIVE LIFE-THREATENING DISORDER CHARACTERIZED BY VERY HIGH SERUM CALCIUM CONCENTRATIONS, SKELETAL DEMINERALIZATION, AND PARATHYROID HYPERPLASIA. IN SOME INSTANCES NSHPT HAS BEEN DEMONSTRATED TO BE THE HOMOZYGOUS FORM O
                                                                                                                                                                                                                                                        (NSHPT), TWO INHERITED CONDITIONS CHARACTERIZED BY ALTERED CALCIUM HOMEOSTASIS. THE MUTATIONS REDUCE THE ACTIVITY OF THE RECEPTOR. FITH AFFECTED INDIVIDUALS EXHIBIT MILD OR MODEST HYPERCALCEMIA, RELATIVE HYPOCALCIURIA, AND INAPPROPRIATELY NORMAL PTH LEVELS. IN COMPACT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HH GLU-557.
1603857; Pu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PubMed=8675635;
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                    ALSO
                                                                    ALSO THE CAUSE
THE RECEPTOR IS
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Paterson C.R.,
                    THE
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, Brown E.M., Seidman
              CAUSE
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Best Local
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EMBL; U20759; AAA86504.1; -.
EMBL; U20760; AAA86504.1; -.
EMBL; D50855; BAA09453.1; -.
EMBL; S83176; AAB46873.1; -.
EMBL; S83176; AAB45873.1; -.
EMBL; S79217; AAB35262.2; -.
EMBL; S68032; AAB29413.2; ALT_SEQ.
EMBL; S68033; AAB29414.1; -.
EMBL; S68036; AAA29415.1; -.
EMBL; S68036; AAA29415.1; -.
EMBL; S68036; AAA29415.1; -.
EMBL; S68036; AAA29415.1; -.
EMBL; S68036; AAA29415.1; -.
EMBL; S68036; AAA29415.1; -.
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DOMAIN
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Pfam; PF00003; 7tm_3; 1.
Pfam; PF01094; ANF_receptor;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOPARATHYROIDISM (ADHP). ADHP IS CHARACTERIZED BY HYPOCALCEMIA AND HYPERPHOSPHATEMIA DUE TO INADEQUATE SECRETION OF PARATHYROID HORMONE. SYMPTOMS ARE SEIZURES, TETAN AND CRAMPS.
SIMILARITY: BELONGS TO FAMILY 3 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601198;
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                                                                                       Similarity
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ETFNCHLQ
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                                 ETINCHEK
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650
6671
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6682
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793
8837
130
130
130
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G_PROTEIN_RECEP_F3_2; 1.
G_PROTEIN_RECEP_F3_3; 1.
G_PROTEIN_RECEP_F3_4; 1.
361
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N-LINKED
N-LINKED
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CYTOPLASMIC (POTENTIAL).
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; Mismatches
                                                                                                        Score
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EXTRACELLULAR (POTENTIAL)
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                                                                                                                                                                                                                                                                   (POTENTIAL).
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                                                                                                                                                                                                                                                                                                                                          (POTENTIAL)
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                                                                     Indels
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RESULT 14 CASR_MOUSE

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CASR_MOUSE STANDARD; PRT; 1079 AA. 090Y96; 008968; 088519; 090Y95; 090ZU8; 09RID6; 016-0CT-2001 (Rel. 40, Created) 16-0CT-2001 (Rel. 40, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Extracellular calcium-sensing receptor precursor Cell calcium-sensing receptor).
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                                                                                                                                                                                                                                       functionally related to the calcium receptor.";

J. Bone Miner. Res. 12:393-402(1997).

-I- FUNCTION: SENSES CHANGES IN THE EXTRACELLULAR CONCENTRATION OF CALCIUM IONS. THE ACTIVITY OF THIS RECEPTOR IS MEDIATED BY A G-PROTEIN THAT ACTIVATES A PHOSPHATIDYLINOSITOL-CALCIUM SECOND
                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 646-799 FROM N.A., AND TISSUE SPECIFICITY.
MEDILNE-97231187; PubMed-9076582;
Quarles L.D., Hartle J.E. II, Siddhanti S.R., Guo R., Hinson
"A distinct cation-sensing mechanism in MC3T3-E1 osteoblasts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. (ISOFORM A), AND TISSUE SPECIFICITY STRAIN-Black Swiss X 129/SVJ; TISSUE-Kidney; MEDLINE-20119279; PubMed-10652312; Pi M., Garner S.C., Flannery P., Spurney R.F., Quarles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oda Y., Tu C.-L., Chang
Elias P.M., Bikle D.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A., ALTERNATIVE SPLICING,
STRAIN-C57BL/6; TISSUE-KIGNEY;
MEDLINE-20092890; PubMed-10625662;
Oda Y., Tu C.-L., Chang W., Crumrine D., K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-Kidney;
Moawad T.I., R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hildenbrand J., Ammon H. Submitted (MAY-1998) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Endocrinology 140:5883-5893(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chang W., Tu C., Chen T.-H., Komuves L., Oda Miller S., Shoback D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Epiphyseal cartilage;
MEDLINE=20043955; PubMed=10579354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 256-600 FROM N.A. (ISOFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Evidence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 507-582 FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Expression and signal transduction of
cartilage and bone.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'Sensing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID-10090;
                                                                                                                                          TISSUE SPECIFICITY: EPIDERMIS, KIDNEY AND CARTILAGE.
SIMILARITY: BELONGS TO FAMILY 3 OF G-PROTEIN COUPLED RECEPTORS
                                                                                                                                                                        SUBCELLULAR LOCATION: Integral membrane protein. ALTERNATIVE PRODUCTS: 2 ISOFORMS; A (SHOWN HERE) PRODUCED BY ALTERNATIVE SPLICING.
                                                                                                                                                                                                                           MESSENGER SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               calcium sensing receptor and its alternatively ne epidermal differentiation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of extracellular cations in CasR-deficient osteoblasts. for a novel cation-sensing mechanism."; Chem. 275:3256-3263(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chem.
                                                                                                                                                                                                                                                                                                                                                                                                         (MAY-1999)
                                                                                                                                                                                                                                                                                                                                                                                                                        Riccardi D
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .P.T.,
                                                                                                                                                                                                                                                                                                                                                                                                       the EMBL/GenBank/DDBJ databases
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PS00981; G_PROTEIN_RECEP_F3_3;
PS50259; G_PROTEIN_RECEP_F3_4;
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PROSITE; PS009879; G_PROTEIN_RECEP_F3_1; 1.

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PROSITE; PS00981; G_PROTEIN_RECEP_F3_3; 1.

PROSITE; PS50259; G_PROTEIN_RECEP_F3_4; 1.
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01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation updat
Extracellular calcium-sensing receptor prec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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MEDILINE=95241465; PubMed=7724534;
Ruat M., Snowman A.M., Snyder S.H.;
"Calcium sensing receptor: molecular cloning in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=95116508; PubMed=7816802; Riccardi D., Park J., Lee W., Gamba G., Brown E.M., Hebert S.C.; "Cloning and functional expression of a rat kidney extracellular calclum/polyvalent cation-sensing receptor."; Proc. Natl. Acad. Sci. U.S.A. 92:131-135(1995).
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EMBL; U20289; AAC52195.1; -.
InterPro; IPR001828; ANF_receptor.
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"Calcium sensing receptor:
to nerve terminals.";
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Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C. Natl. Acad. Sci. U.S.A. 92:3161-3165(1995).
FUNCTION: SENSE CHANGES IN THE EXTRACELLULAR CONCENTRATION OF CALCIUM IONS. THE ACTIVITY OF THIS RECEPTOR IS MEDIATED BY A G-PROTEIN THAT ACTIVATES A PHOSPHATIDYLINOSITOL-CALCIUM SECOND MESSENGER SYSTEM.
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SIMILARITY: BELONGS TO FAMILY 3 OF G-PROTEIN COUPLED RECEPTORS
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Transmembrane; Glycoprotein; Signal.
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Search completed: July 11, 2003, 11:55:10 Job time: 2.86071 secs

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ALIGNMENTS

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RESULT 2
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ID Q920J5
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"Identification of genes associated with perianth senescence daffodil (Narcissus pseudonarcissus L. 'Dutch Master').";

Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AF462203; AAL69366.1;

InterPro; IPR005123; 20G-FeII_Oxy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Narcissus pseudonarcissus (Daffodil).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Amaryllidaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Putative iron/ascorbate oxidoreductase mRNA (Fragment).
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AC Q9VDU4;

DT 01-MAY-2000 (TrEMBLrel. 13, Created)

DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)

DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)

DE CG6300 protein.

GN CG6300.

OS Drosophila melanogaster (Fruit fly).

OC Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta

OC Pterygota; Meoptera; Endopterygota; Diptera; Brachycera; Mus
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Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,

Burtis K.C., Bestan M.R., Bouck J., Brokstein P., Brottier P.,

Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,

Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,

de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,

de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,

dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,

Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W.,

Fosler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,

da Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,

da Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,

da Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,

da Hostin M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,

da Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
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Ananatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
Abril J.F., Agbayani A. Baxendale J., Bayraktaroglu L., Beasley E.M.,
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01-DEC-2001 (
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-1-SIMILARITY: BELONGS TO THE SERPIN FAMILY. EMBL; AF105329; AAL16769.1; -.
InterPro; IPRO00215; Serpin.
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=21368006;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus norvegicus
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5; Conser
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oa; Chordata;
ia; Rodentia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               φ
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55.6%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rattus.
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RX MEDLINE=20196006; pubMed=10731132;

RA Addams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RA Addams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RA Addams M.D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F.,

RA Addams M.D., Schorer S.E., Li P.W., Hoskins R.A., Galle R.F.,

RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,

RA George R.A., Lewis S.E., Richards S., Ashburner M., Pfeiffer B.D.,

RA George R.A., Lewis S.E., Richards S., Ashburner M., Pfeiffer B.D.,

RA George R.A., Lewis S.E., Richards S., Canape M., Pfeiffer B.D.,

RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,

RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,

RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,

RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,

Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,

RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,

RA Beeson K.Y., Denos P.V., Berman B.P., Bhandari D., Bolshakov S.,

RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,

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RA Gebriy J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,

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RA Gebriy J.M., Cawley S., Dahlke C., Davenport L.B., Dietz S.M.,

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RA Gebriy J.M., Cawley S., Dahlke C., Davenport L.B., Davies F., Candra I.,

RA Gebriy J.M., Cawley S., Davens M., Davenport L.
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Interpro; IPR000873; AMP-bind.
Pfam; PF00501; AMP-binding; 1.
PROSITE; PS00010; ACTINI, I; UNKNOWN.
SEQUENCE 199 AA; 22504 MW; Db6AFF
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Musc
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01-MAY-2000 (TrEMBLrel.
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01-MAY-2000
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100.0%; Pr
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Lasko P., Lei Y., Levitsky A.A., Li J., Liang Y., Liang Y., Lin X., Mattel B., McIntosh T.C., McLeod M.P., McPherson D., RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A., RA McHorn D.R., Nelson K.A., Nixon K., Nusskern D.R., Nelson K.A., Nixon K., Nusskern D.R., Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H., RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E., Syirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X., RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A., RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q.A., RA Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu X., Smith H.O., RA Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.; The genome sequence of Drosophila melanogaster."; Science 287:2185-2195(2000).
DR EMBL, AE003727; AAF55697.1; -. Ushase; Fhannan.
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01-MAR-2002 (TrEMBLrel. 20, L;
Hypothetical protein R03183.
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Bolstard P., Becker A., Boutry M., Cadieu E., Dreano S., Gloux S.,
Godrie T., Goffeau A., Kahn D., Kiss E., Lelaure V., Masuy D.,
Pohl T., Portefelle D., Puehler A., Purnelle B., Ramsperger U.,
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Sinorhizobium meliloti strain 1021.";
Proc. Natl. Acad. Sci. U.S.A. 98:9877-9882(2001).
EMBL; AL591793; CAC47762.1; -
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Bacteria; Proteobacteria; alpha subdivision;
Rhizobiaceae; Sinorhizobium.
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Pfam; PF00501; AMP-binding; 1.
PROSITE; PS00019; ACTININ 1; UNKNOWN 1.
SEQUENCE 208 AA; 23559 MW; E41495344B417C35 CRC64;
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"Ly-49W: a novel activating receptor of NOD mice with homology inhibitory receptor Ly-49G that recognizes H-2Dk and H-2Dd.";
Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AF20426B; AAF75837.1; -.
EMBL; AF30794B; AAG41969.1; -.
MGD; MGI:1321091; Klra12.
InterPro: IPR001304; Lectin_C.
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Eukaryota; Metazoa;
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J. Leukoc. Biol. 0:0-0(2000).
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r LY49W2 (Natural killer cell receptor Ly-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LY-49W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred.
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Sciurognathi; Muridae;
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Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
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; Murinae; Mus
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murinae; Mus
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01-OCT-2000 (TrEMBLrel. 15, La
T 01-JUN-2001 (TrEMBLrel. 17, La
Lectin-related NK cell recept-
Ly-4912)
                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches
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Best Local S
Matches 6
                                                      Q9JIQ1
Q9JIQ1;
01-OCT-2000
01-OCT-2000
01-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q99P19;
01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation updat
                                                                                                                                                                                                                                                                                                                                              Pfam; PF00059; lectin_c; 1.
SMART; SM00034; CLECT; 1.
PROSITE; PS50041; C_TYPE_LECTIN_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDILINE-21103262; PubMed-11160290;
Silver E.T., Gong D.-E., Hazes B., Kane K.P.
"Ly-49W, an Activating Receptor of Nonobese
Homology to the Inhibitory Receptor Ly-49G,
2Dd."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2Dd."
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EMBL; AF28325; AAGJ0158.1; --
EMBL; AF074463; AAG90959.1; --
MGD; MGI:193033; KLTa23.
InterPro; IPR001304; Lectin_C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-NOD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KLRA13 OR LY49M.
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                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Silver E.T., Gong D.-E., Hazes B., Kane K.P. Ly-49W: a novel activating receptor of NOD inhibitory receptor Ly-49G that recognizes in
                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                Immunol. 166:2333-2341(2001).
BL; AF283252; AAK11559.1; -.
D; MGI:1321090; Klra13.
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                                                                                                                                                                                                                                                                                                                         265
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                                                                                                                     PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                        30733 MW;
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75.0%;
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                                     . 15, Created)
. 15, Last sequence update)
. 17, Last annotation update)
receptor LY49L2 (Natural killer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .0%;
                                                                                                                                                                                                                                                       Score 37; DB Pred. No. 16; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1;
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                      F93E1D49EC2670CF CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       eptor of NOD mice with homology
recognizes H-2Dk and H-2Dd.";
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No.
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Ly-49G, Recognizes H-2
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H-2Dk and
                                      cell receptor
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Q9EP57
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                        SMART;
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Query Match
Best Local
                       Silver E.T., Gong D.-E., Hazes B., Kane K.P.;
"Ly-49W: a novel activating receptor of NOD mice with homology
inhibitory receptor Ly-49G that recognizes H-2Dk and H-2Dd.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF283250; AAG10157.1; -.
EMBL; AF283250; AAG10157.1; -.
EMBL; AF074459; AAG09058.1; -.
MGD; MGI:1930932; Klra23.
InterPro; IPR001304; Lectin_C;
Pfam; PF00059; lectin_C; 1.
                                                                                                                                                                                                                                                                                                                                                                        Y9W1,
KLRA23 OR KLKA1.
Mus musculus (Mouse).
Mus musculus (Mouse).
Metazoa; Chordata;
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SEQUENCE
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"Ly-49W: a novel activating receptor of NOD mice with homology inhibitory receptor Ly-49G that recognizes H-2Dk and H-2Dd.";
Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AF204266; AAF75835.1;
EMBL; AF307947; AAG41968.1;
MGD; MGI:1321091; Klral2.
                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
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01-MAR-2001 (TrEMBLrel. 16, 1
01-DEC-2001 (TrEMBLrel. 19, 1
Natural killer cell receptor
                                                                                                                                                                                                                                               Silver E.T., Gong D.-E., Hazes B., Kane K.P.;
"Ly49W: a novel activating receptor of NOD mide with homology inhibitory receptor Ly49g that recognizes H-2Dk and H-2Dd.";
Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                   Silver E.T., Gong
                                                                                                                                                                                                                                                                                                                       STRAIN-NOD;
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Anderson S.K.;
"Identification of the Ly49L
counterparts to inhibitory re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE;
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Mammalia; Eutheria;
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                  SM00034; CLECT;
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C_TYPE_LECTIN_2;
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Rođentia;
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Last annotation killer
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                                                                                                                                                                                                                                                                                                                                                                                       Craniata; Vertebrata; | Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
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Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                D15013DF7417D4AA CRC64;
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17;
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Best Local S
Matches
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Best Local
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J. Leukoc. Biol. 0:0-0(2000).

EMBL; AF204267; AAF75836.1; -.

MGD; MGI:1321091; K1ra12.

Interpro; IPR001304; Lectin_C.

Pfam; PF00059; lectin_C; 1.

SMART; SM00034; CLECT; 1.

PROSSITE; PS50041; C_TYPE_LECTIN_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                            Q9JIQ2;
01-OCT-2000 (TrEMBLrel. 15,
01-OCT-2000 (TrEMBLrel. 19,
01-DEC-2001 (TrEMBLrel. 19,
Lectin-related NK cell recep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (Mouse).
Mus musculus (Mouse).
Thereas, Chordata;
Thereas, Rodentia;
"Identification of the Ly49L protein: evidence counterparts to inhibitory receptors.";
J. Leukoc. Biol. 0:0-0(2000).
EMBL; AF204265; AAF75834.1; -
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Q9JIQ0;
01-QCT-2000 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
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01-DEC-2001
                                                                                                                                                                                      STRAIN-CBA/J;
                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                   KLRA12
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                                                                                                                          Anderson S.K.;
                                                                                                                                                    Makrigiannis A.P.,
                                                                                                                                                                                                                                                                           NCBI_TaxID-10090;
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ted NK cell r
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                                                                                                                                                          Etzler
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Rodentia;
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receptor LY49L1
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receptor LY49L3.
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Pred. No. 17;
1; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                                                                                                    Winkler-Pickett
                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Winkler-Pickett R.,
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                                                                                              for
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                                                                                           activating
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Murinae; Mus
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RESULT 14
Q9V9N7
ID Q9V9N
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Q12180
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   Q9V9N7
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Query Match
Best Local :
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Best Local (
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01-NOV-1996 (
01-NOV-1996 (
01-JUN-2002 (
                                                                                                                                                                                               -!- SUBCELLULAR LOCATION: NUCLEAR (BY SIMILARITY).
-!- SIMILARITY: CONTAINS 1 FUNGAL-TYPE BINUCLEAR CLUSTER DOMAIN.
EMBL; 27481; CAA99101.1; -.
EMBL; X83121; CAA58190.1; -.
HSSP; P21228; PALC.
SGD; S0005449; HAL9.
Interpro; IPR001138; Fung1_Trn.
Pfam; PF00172; Zn_clus; 1.
                                                                                                                                                                                                                                                                                                           umstein E., Pearson B.M., Kalogeropoulos A., "A 29.425 kb segment on the left arm of yeast more than twice as many unknown as known open Yeast 11:975-986(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGD; MGI:1321091; Klra12.
InterPro; IPR001304; Lectin_C.
Pfam; PP00059; lectin_C: 1.
SMART; SM00034; CLECT; 1.
SMART; PS50041; C_TYPE_LECTI
                                                                                                                                                        Pfam; PF00172; Zn_clus; 1.
SMART; SM00066; GAL4; 1.
PROSITE; PS00463; ZN2_CY6_FUNGAL_1;
PROSITE; PS50048; ZN2_CY6_FUNGAL_2;
                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. STRAIN-FY1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Saccharomyces cerevisiae (Baker's yeast). Eukaryota; Fungi; Ascomycota; Saccharomyc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-JUN-2002 (TrEMBLrel. 21, Chromosome XV reading frame
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SEQUENCE 281 AA;
                                                                                                               SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zumstein
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                                                                                                                                          DNA-binding;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted
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689
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5; Conserv
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SRVLNCHFR
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1 (JUL-1996)
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                                                                                                                1030 AA;
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                                                       Conservative
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697
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55.6%;
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75.0%;
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e EMBL/GenBank/DDBJ
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Pred. No.
                                                       2
                                                                     Pred.
                                                                                    Score
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                                                       Mismatches
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                                                                                                               8C8BDE84066D2105 CRC64;
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17;
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reading fra
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chromosome XV
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databases
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PRELIMINARY;

PRT;

1354 AA.

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RESULT 15
Q8S6H9
ID Q8S6H
AC Q8S6H
DT 01-JU
DT 01-JU
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                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                     Matches
 Q8S6H9 PRELIMINARY;
Q8S6H9;
01-JUN-2002 (TrEMBLrel. 2:
01-JUN-2002 (TrEMBLrel. 2:
01-JUN-2002 (TREMBLrel. 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID-7227;
                                                                                                                                                                                                                                                                                                                                           "The genome sequence of Drosoph Science 287:2185-2195(2000). EMBL; AE003782; ARF572491; - FlyBase; FBgn0032976; CG6448.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-BERKELEY
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01-MAY-2000 (TrEMBLrel.
01-JUN-2000 (TrEMBLrel.
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01-MAY-2000
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                                                                                                                                                                                                                                                   Conservative
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83.3%;
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21,
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14,
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Last sequence update)
Last annotation update)
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Last sequence update)
Last annotation update)
                                        Created)
                                                                             PRT;
                                                                                                                                                                                                                                                                                                                         770F5904A634EFD6 CRC64;
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Search completed: July 11, Job time: 5.92931 secs

2003, 11:58:48

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Matches 4
                                                                                                      Kuit K., Nascimento L., Baker J., Santos L., Zutavern T., Miller B., Cunnius D.M., Katzenberger F., Muller S., Bell M., Balija V., Shah R., King L., Yang C., Dike S., O'Shaughnessy A., Palmer L., Dedhia N., "Genomic sequence for Oryza astiva, Nipponbare strain, clone OSJNBb0023M11, from chromosome 10, complete sequence."; Submitted (ApR-2002) to the EMBL/GenBank/DDBJ datakana
                                                                                                                                                                                                                                                           Oryza sativa (Rice).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Ehrhartoideae; Oryzeae; Oryza.

MCBI_TaxID=4530;
                                                                                                                                                                                                                                                                                                                                   Putative retroelement. OSJNBB0023M11.15.
1035 QSVNCHFQ 1042
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                                                      Conservative
                                                               69.2%;
50.0%;
                                                   Score 36; DB Pred. No. 1.3e
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1.3e+02;
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OM protein - protein search, using sw model
                                                                                         GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd
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Title: Perfect score: US-10-091-442-2 40 July 11, 2003, 11:42:16; Search time 4.01663 Seconds (without alignments)
232.223 Million cell updates/sec WQSAFTK 7

Run on:

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 10

Listing first 45 summaries 100%

Database : A_Geneseq_101002:*

10: 12: 13: | SIDS2/gcgdata/geneseq/geneseqp-embl/AA1980 DAT: *
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Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being part and is derived by analysis of the total score distribution. printed,

SUMMARIES

Result No.	Score	Query Match Length DB	ength	BB	ID	Description
1	40	100.0	380	15	AAR48379	Human megakaryocyt
N	40	100.0	380	20	AAY08254	Human megsin prote
w	40	100.0	380	21	AAB24142	Human megsin prote
4	40	100.0	380	22	AAB83075	Human megsin prote
ហ	36	90.0	306	22	ABG02777	
6	36	90.0	323	22	ABG11497	Novel human diagno
7	36	90.0	368	20	AAY08256	
8	36	90.0	368	21	AAB24151	Mouse megsin prote
9	36	90.0	368	22	AAB83077	Murine measin prot
10	36	90.0	380	20	AAY08255	Rat megsin protein

44444433333333322222222222222222222222	111 112 113 114 115
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221222222222222222222222222222222222222	222
AAY35082 AAB43351 AAG64950 ABB62164 AABB62164 AABB62164 AAB628546 AAG6492 AAG658546 AAG585578 AAG37074 AAG37074 AAG37073	AAB24150 AAG64286 AAB83076 ABG29897 ABG29842 AAY92833 AAY92833
Chlamydia pneumoni Human ORFX ORF3115 Human Creaml prote Human Creaml prote Brosophila melanog Protein fragment e Human polypeptide Arabidopsis thalia C glutamicum prote Human polya SEO ID Arabidopsis thalia Arabidopsis thalia Arabidopsis thalia Arabidopsis thalia Arabidopsis thalia Arabidopsis thalia Neisseria meningit Human immunoglobul Arabidopsis thalia Chlamydia pneumoni Neisseria meningit Neisseria meningit Neisseria meningit Neisseria meningit Neisseria meningit Neisseria gonorrho Putative P. abyssi Streptococcus poly Amino acid sequenc C. pneumoniae CPNI C. pneumoniae CPNI C. pneumoniae CT87 Chlamydia pneumoni	Rat megsin protein Rat megsin protein Rat megsin protein Novel human diagno Novel human diagno C. pneumoniae CPNI Chlamydia pneumoni

ALIGNMENTS

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P AAR48379 standard; Protein; 380 AA. Human megakaryocyte differentiation factor 16-AUG-1994 (first entry) AAR48379;

Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.

Homo sapiens

EP583884-A.

23-FEB-1994

19-JUL-1993; 93EP-0305654

17-JUL-1992; 04-MAR-1993; 92JP-0212305 93JP-0067339

(SUNR) SUNTORY LTD. (TSUJ/) TSUJIMOTO M.

Ishida N, Iv Tsujimoto M, Iwasa F, Kurihara T, Miura K, Nakazato H; M, Tsuruoka N, Yamaguchi N, Yamaichi K;

WPI; 1994-058782/08. N-PSDB; AAQ56670.

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RESULT 2
AAYO8254
ID AAYO
XX AAYO
XX AAYO
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DT 14-J
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                                                                                                                                         This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
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RESULT 4 AAB83075

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AAB83075

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RESULT 3
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                                            Query Match
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Matches 7
                                                                                                   The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                (KURO/)
                                                                                                                                                                                                                                                                          Evaluating renal function comprises assaying megsin protein biological sample
                                                                                                                                                                                                                                                                                                            WPI; 2000-611642/58
N-PSDB; AAA99294.
                                                                                          Sequence
                                                                                                                                                                                                                                                    Example 2; Page 66-69;
                                                                                                                                                                                                                                                                                                                                              Miyata T;
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28-OCT-1999;
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181
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) FUSO PHARM IND :
) MIYATA T.
              1 WQSAFTK 7
                                            Similarity 7; Conserv
WQSAFTK 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WQSAFTK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WQSAFTK 187
                                                                                          380 AA;
                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-JP01646.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
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99JP-0306623.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein;
                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence
                                                                                                                                                                                                                                                   93pp; Japanese
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                                             Mismatches
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useful in of mutations

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Matches 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments \,
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N-PSDB; AAF82438.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human megsin protein
              30-MAR-2001; 2001WO-US08631
                                           11-OCT-2001
                                                                                                                        Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                  13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-2001
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                                                                                                  Homo
                                                                                                                                                                      Novel human
                                                                                                                                                                                                                             ABG02777;
                                                                                                                                                                                                                                                         ABG02777 standard; Protein; 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Page 44-46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity hes 7; Conserv
                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                             181 WOSAFTK 187
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                                                                                                                                                                                                                                                                                                                                               WQSAFTK 7
                                                                                                                                                                                                                                                                                                                                                                                                                                              380
                                                                                                                                                                   diagnostic protein #2768
                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                 .0%;
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Pred. No.
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                                                                                                                                                                                                                                                                                 RESULT 6
ABG11497
ID ABG1
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                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences of the invention.

Note: The sequence data for this pattent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at figure in the printed specification, but was obtained in electronic format directly from WIPO at figure in the printed specification.
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 20; SEQ ID No 33136; 103pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutation responsible for genetic disorders or other traits and to assess biodiversity
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23-AUG-2000; 2000US-0649167.
31-MAR-2000;
23-AUG-2000;
                                        30-MAR-2001; 2001WO-US08631
                                                                                               WO200175067-A2
                                                                                                                           Homo sapiens.
                                                                                                                                                                                                 Novel
                                                                                                                                                                                                                             18-FEB-2002
                                                                                                                                                                                                                                                         ABG11497;
                                                                                                                                                                                                                                                                                    ABG11497 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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                                                                                                                                                      Human; chromosome mapping; gene mapping; gene therapy;
food supplement; medical imaging; diagnostic; genetic (
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                                                                                                                                                                                                                                                                                                                                                          108
                                                                                                                                                                                              human diagnostic protein #11488
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                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
2000US-0540217
2000US-0649167
                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                                                                                                                                                                                                                                                                                     Protein; 323
                                                                                                                                                                                                                                                                                                                                                                                                                               90.0%;
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54;
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Length 306 Indels

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RESULT 7
AAY108256
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at fifth wipo.int/pub/published_pct_sequences.
                                                                                       01-APR-1999
                                                                                                                                           W09915652-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity
                              22-SEP-1998;
                                                                                                                                                                                                                                      Protein
                                                                                                                                                                                                                                                                                                                          Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                    human;
                                                                                                                                                                                                                                                                                                                                                                                                               Megsin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY08256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY08256 standard; Protein; 368 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                      mesangial cell; treatment; diagnosis; disease;
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                              98WO-JP04269
                                                                                                                                                                                                                                      Location/Qualifiers
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                                                                                                                                                                                                    "partial sequence"
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57;
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                                                                                                                                                                                                                                                                                                                                                                                                         IgA nephropathy;
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RESULT 8
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Matches 6
                                                                                      WPI; 2000-611642/58
N-PSDB; AAC55239.
                                                                                                                                                    (KURO/)
                                                         Evaluating renal function comprises assaying megsin protein biological sample \,\,
                                                                                                                                                                                                                                                                                               Megsin; mesangium-predominant gene; serpin regulated; IgA; immunoglobulin A; detection; renal function; renadiagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial
                                                                                                                      Miyata T;
                                                                                                                                                                                                                                                                             Mus musculus.
                                                                                                                                                                                                                                                                                                                                        Mouse megsin
                                                                                                                                                                                                                                                                                                                                                                                                     AAB24151 standard; Protein; 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 76-79; 100pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-276983/23
N-PSDB; AAX56714.
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                                                                                                                                                                                   19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                 17-MAR-2000; 2000WO-JP01646
                                                                                                                                                                                                                                     28-SEP-2000
                                                                                                                                                                                                                                                         WO200057189-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cells, such as IgA nephropathy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Megsin protein expressed specifically in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                          (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-SEP-1997;
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nes 6; Conserv
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                                                                                                                                                    FUSO PHARM IND LTD
                                                                                                                                                               KUROKAWA K
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                        protein sequence
                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                  99JP-0075305.
99JP-0306623.
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The present invention describes a method for evaluating renal function. The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing

Disclosure;

Page 89-91; 93pp; Japanese

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RESULT 9
AABB3077
ID AABB
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                       Query Match
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Matches 6
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Matches
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                                                                                                                   The present sequence is murine megsin protein. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useful for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                renal function; and (2) a kit for detecting megsin protein comprising:
(a) antimegsin protein antibody attached to solid magnetic particles;
(b) direct or indirect fixing for the antibody to the particles; and
(c) a magnet. The process is useful for evaluating renal function and
diagnosing renal disorders by assaying megsin protein in biological
samples (preferably urine or blood). The process is reproducible and
gives accurate results. The present sequence represents the mouse megsin
                                                                                                                                                                                                                                                                                                                             WPI;
                                                                                Sequence
                                                                                                                                                                                                                                           Disclosure; Page 52-53; 62pp; Japanese.
                                                                                                                                                                                                                                                                    Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments \cdot
                                                                                                                                                                                                                                                                                                               N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murine megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB83077;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                 (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                              (KURO/) KUROKAWA K.
                         Local Similarity
hes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity es 6; Conserv
                                                                                                                                                                                                                                                                                                               2001-300136/31.
DB; AAF82440.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
 WQSAFTK 7
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                                                                                368 AA;
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                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-JP06988
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                                        90.0%;
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                                                                                                                     y of chronic glomerular diseases and for prevention and treatment of the diseases. See made easily and in large numbers.
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Pred.
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Pred. No.
                         Mismatches
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RESULT 10
AAY08255
ID AAY08256
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AAB24150
ID AAB24
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                                                 Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial
Rattus norvegicus
                                                                                                                                                                                                                          30-JAN-2001
                                                                                                                                                                                                                                                                                 AAB24150;
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N-PSDB; AAX56712.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
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                                                                                                                                                                  Rat megsin protein sequence
                                                                                                                                                                                                                                                                                                                                        AAB24150 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cells, such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Megsin protein expressed specifically in mesangial cells
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WQSAFTK 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                          (first entry)
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No.
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Matches 6
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                                                                                                                    05-JUL-2001
                                                                                                                                                                                                                Rattus norvegicus
                                                                                                                                                                                                                                                                                                            Rat megsin
                        28-DEC-1999;
                                                                   26-DEC-2000;
                                                                                                                                                                 WO200148019-A1
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N-PSDB; AAC55238.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM IND
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAR-1999;
28-OCT-1999;
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                                                                                                                                                                                                                                                                megsin; renal
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                                                                                                                                                                                                                                                                                                            protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
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                                                                     2000WO-JP09251.
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99JP-0306623
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                                                                                                                                                                                                                                                             mesangial cell; mesangium proliferative nephritis
                                                                                                                                                                                                                                                                                                                                                            entry)
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The present sequence is rat megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an complex and an increase in mesangial cells. The animal model

animal model is useful

an immune

mode1

of.

Disclosure; and screening

Page

48-50;

62pp; Japanese.

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RESULT 13
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Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a novel antibody which recognises a peptide consisting of residues 341-354 of rat megsin protein. The present sequence is the protein sequence for at megsin, which was used in the present invention. Mesgin is highly expressed in renal mesangial cells and its level is elevated in mesangium proliferative nephritis. Assay of the serum or urine level using the antibody is therefore indicative of
                                                                                Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments
                                                                                                              WPI; 2001-300136/31
N-PSDB; AAF82439.
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N-PSDB; AAH48181.
                                                                                                                                            Miyata
                                                                                                                                                                (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                06-OCT-1999;
                                                                                                                                                                                                                    06-OCT-2000;
                                                                                                                                                                                                                                                             WO200124628-A1
                                                                                                                                                                                                                                                                                  Rattus
                                                                                                                                                                                                                                                                                                   Rat; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening
                                                                                                                                                                                                                                                                                                                                   Rat megsin protein
                                                                                                                                                                                                                                                                                                                                                        10-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                            AAB83076;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the serum or urine lev
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diagnosis of
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(MIYA/) MIYATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 WKSAFTK
                                                                                                                                              Τ,
                                                                                                                                                                                                                                                                                 norvegicus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KUROKAWA K.
MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                              standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            recognizing a partial sequence of mesangium proliferative nephritis
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                 polypeptide (II) sequences. (I) is useful as hybridisation probes,

complymerase chain reaction (PCR) primers, oligomers, and for chromosome

and gene mapping, and in recombinant production of (II). The

polymucleotides are also used in diagnostics as expressed sequence tags

for identifying expressed genes. (I) is useful in gene therapy techniques

to restore normal activity of (II) or to treat disease states involving

(II). (II) is useful for generating antibodies against it, detecting or

quantitating a polypeptide in tissue, as molecular weight markers and as

a food supplement. (II) and its binding partners are useful for treating

disorders involving aberrant protein expression or biological activity.

The polypeptide and polynucleotide sequences have applications in

diagnostics, forensics, gene mapping, identification of mutations

responsible for genetic disorders or other treats to assess biodiversity

and to produce other types of data and products dependent on DNA and

diagnostic amino acid sequences of the invention

of the sequence data for this natural did not annear in the printed
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23-AUG-2000;
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food supplement; medical imaging; diagnostic; genetic disorder.
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at ftp.wipo.int/pub/published_pct_sequences.
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                            Note: The sequence data for this patent did not appear in the specification, but was obtained in electronic format directly
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model Run on: July 11, 2003, 11:49:36; Search time 1.25156 Seconds (without alignments) 164.563 Million cell updates/sec

Title: Perfect score: Sequence: US-10-091-442-2 40 1 WQSAFTK 7

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/1aa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
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6: /cgn2_6/ptodata/1/1aa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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28	2 2 8 8	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	30	30	40	40	40	40	Score
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	87
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ALIGNMENTS

	CTERISTICS:	٠
	INFORMATION FOR SEO ID NO: 2:	
	TELEPHONE: (703) 836-6620	٠.
	TELECOMMUNICATION INFORMATION:	٠.
	BE	٠.
	REGISTRATION NUMBER: 39,300	· ·
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	04-MAR-1993	٠.
	APPLICATION NUMBER: JP 6-067339	٠.
	PLICATION DATA:	
	FTITING DATE: 17-JIII1992	
	TION DATA:	٠.
	ING DATE: 14-JUL-	٠.
	APPLICATION NUMBER: US 08/091,028	٠.
	DATA:	
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	20	
	APPLICATION NUMBER: US/08/611.977	
	CHEDDRAT ADDITION DATA:	
	SYSTEM: PC-DOS/MS-DOS	٠.
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	HE FORM:	٠.
	313-1404	٠.
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	Alexandria	
	O. Box 1404	
	ADDRESSEE: Burns, Doane, Swecker & Mathis	
	CORREGEOUTENCES ATTRESSO:	
FACTOR	TNVENTION: N	٠.
	T: YAMAGUCHI, NO. 5972886c	٠.
	: YAMAICHI, Kozo	٠.
	: KURIHARA, Tatsuya	٠.
	••	٠
	••	
	: NAKAZATO, Hiros	٠
	TSUROU	
	IWASA, Fuy	
	APPLICANT: TSUJIMOTO, Masafumi	
	Patent No. 5972886	
	Sequence 2 Application HS/08611977	٠.
	TIC-08-611-977-9	= 2
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Best Local Similarity 100.0%; Matches 7; Conservative (

Pred. No. 2.3;); Mismatches

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Indels

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   Query Match
                                                                                                                 TELEFAX: (703) 836-20 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                     FILING DATE: 14-JUL-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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                                                                                      LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                        RIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                       RIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC
OPERATING SYSTEM:
                                                            TOPOLOGY:
                                                                                                                                               TELEPHONE:
                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: JP 4: FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/472,659 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
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                                                                        amino acid
                                                                                                                                                                                                      McGowan, Malcolm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Burns, Doane, Swecker & Mathis P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KURIHARA, TALBUJU
KURIHARA, TALBUJU
YAMAICHI, KOZO
YAMAGUCHI, NO. 5831030omi
YAMAGUCHI, NO. 5831030omi
YENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 amino acids
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NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                          PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                         IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TSUJIMOTO, Masafumi
                                                                                                                                               (703) 836-6620
                                           protein
                                                                                                                                                                                                                                                                                04-MAR-1993
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14-JUL-1993
                                                                                                              836-2021
NO: 34:
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   100.0%;
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   Score 40;
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Length 380;
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Query Match
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                                                                                                                     ; TOPOLOGY: 11; ; MOLECULE TYPE: US-08-474-661-34.
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US-08-474-661-34
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                                                                                                                                                                                                               TELEFAX: (703) 836-66 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 17-JUL-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                    FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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                                                                                                                                                                                 LENGTH: 380 amino acids
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                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 07-JUL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
181 WQSAFTK 187
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                            1 WQSAFTK 7
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                                                                                                                                                                                                                                                                                                         REA, TERESA STANEK
                                                                                                                                                                 amino acid
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                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KURIHARA, Tatsuya
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                                                           0;
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                                                        Score 40; DB 2; L
Pred. No. 2.3;
Pred. No. 2.3;
                                                                                        DB 2; Length 380;
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PROTEASE-ACTIVATED RECEPTOR

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                                                                                                                 US-09-053-866-2
                                                                                                                               RESULT 5
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                                                                              Sequence 2,
Patent No.
                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                      Query Match
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GENERAL II
                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                     APPLICANT:
                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 17-JUL-
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/611,977 FILING DATE: 06-MAR-1996
                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 14-JUI
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                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE
                                                                                                                                                                              181 WQSAFTK 187
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                                                                INFORMATION:
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                                                                                                                                                                                                                                          Similarity 7; Conserv
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                                                                                                Application US/09053866
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P.O. Box 1404
Xu, Wenfeng
Presnell, Scott R.
Yee, David P.
Foster, Donald C.
                                                                                                                                                                                                                                                                                                                                                                                                                       (703)
                                                                                                                                                                                                                                          Conservative
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YAMAICHI, Kozo
YAMAGUCHI, No. 5972886om1
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                               Scott R.
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Pred. No.
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US-09-479-130-2
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                                                                                                                                                                                                                                                                                      Sequence
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Matches 5; Conserv
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                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-442-6674
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MEDIUM TYPE: Diskett
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PRIOR APPLICATION DATA:
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                                                                                                                                                                           APPLICANT: FOSTER, Donald C.
TITLE OF INVENTION: PROTEASE-ACTIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
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COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Leith, Debra K REGISTRATION NUMBER:
                                                                               COUNTRY:
                                                                                                                         STREET:
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                                                                                            Seattle
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                                                                                                                                                                                                                                 Presnell,
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mell, Scott R.
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internal
                                          Diskette
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83.3%;
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Pred. No. 1.8e+02;
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CURRENT APPLICATION NUMBER: US/09/216,295
CURRENT FILING DATE: 1998-12-18
NUMBER OF SEQ ID NOS: 41
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 381
TYPE: PAT
ORGANISM: Streptomyces lividans Celb
US-09-216-295-22
                                                                                                                           RESULT 8
US-08-543-238-11
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                                                                                  Sequence 11, Application US/08543238 Patent No. 5607919 GENERAL INFORMATION:
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Best Local Similarity 83.3%;
Matches 5; Conservative
                                                                                                                                                                                                                                               Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Mitchinson, CAPPLICANT: Wendt, Dan J.
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                                    APPLICANT:
APPLICANT:
APPLICANT:
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REGISTRATION NUMBER: 32,619
REFERENCE/DOCKET NUMBER: 98
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-442-6674
NUMBER
                         APPLICANT:
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FRAGMENT TYPE:
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            TITLE OF
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APPLICATION NUMBER: US/09/479,130
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TOPOLOGY: lir
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                                                                                                                                                                                      309 WQLAFT 314
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                                                                                 INFORMATION:
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o. 6268328
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          INVENTION: Anti-Mic
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                                 Bojsen, Kirsten
Kragh, Karsten M.
Mikkelsen, Jorn D
                                                                                                                                                                                                                                            Conservative
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internal
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83.3%;
          Anti-Microbial Proteins
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Pred. No. 2.8e+02;
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Pred. No. 1
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US-08-420-526-11
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INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
I-RNGTH: 146 amino acids
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APPLICANT: BOJSen, Kirsten
APPLICANT: Kragh, Karsten M.
APPLICANT: Mikkelsen, Jorn D
APPLICANT: Nielsen, Klaus K.
                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                           CLASSIFICATION: 800 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Mikkelsen, Jorn D.
APPLICANT: Nielsen, Klaus K.
TITLE OF INVENTION: Anti-Microbial Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Rel
TELECOMMUNICATION INFORMATION: TELEPHONE: 415/354-3588
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NAME: Marcus-Wyner, Lynn
REGISTRATION NUMBER: 34,
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ADDRESSEE: Sandoz Agro,
STREET: 975 California
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                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                            NAME: Marcus-Wyner, Lynn REGISTRATION NUMBER: 34,869 REFERENCE/DOCKET NUMBER: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                            COUNTRY: UZIP: 94304
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REFERENCE/DOCKET NUMBER: 13
                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                            CITY:
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                                                                                                                             APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 WQSAFTK 7
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                                                                                                                                                                                                                                                                                         Palo Alto
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)GY: linear
                                                                                                                                                                                                                                                                            CA
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                                                                                                                                                                                                                                                                                                        E: Sandoz Agro, Inc.
975 California Avenue
                                                                                                                                                                                                                                                           USA
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57.1%;
                                                                                                                             US/08/420,526
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                               137-1078/MA
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Pred. No.
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                                                                                                                                                           Version
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                                                                                                                                                             #1.25
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CURRENT APPLICATION NUMBER: US/09/134,001C
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5674
SEQ ID NO 4482
LENGTH: 177
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                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                                                                                                                                                                          Sequence 46,
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                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 17
TYPE: PRT
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                           COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                          TITLE OF INVENTION: Nucleotide and Peptide Sequences of a TITLE OF INVENTION: Hepatitis C Virus Isolate, Diagnostic TITLE OF INVENTION: Applications NUMBER OF SEQUENCES: 46

CORRESPONDENCE ADDRESS:
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LENGTH: 146 amino acids
TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                              STREET: LJUV 1 CONTY: Washington
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mes 5; Conserv
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les 4; Conserv
                                                                                                                                     ADDRESSEE: Finnegan, Henderson, Farabow, ADDRESSEE: Dunner STREET: 1300 I Street, N.W.
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5866139
                                                                                                                                                                                                                                                                                 Porchon, Colette
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PC-DOS/MS-DOS
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83.3%;
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Pred. No.
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Pred. No.
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;; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-483-695-46
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 46
CORRESPONDENCE ADDRESS:
                                                                                                       APPLICATION NUMBER: US/07/965,285
FILLING DATE: 18-MAR-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 91 06 882
FILING DATE: 06-JUN-1991
                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
NAME: Meyers, Kenneth J. REGISTRATION NUMBER: 25,146 REGISTRATION NUMBER: 05: TELECOMMUNICATION INFORMATION: TELEPHONE: 202-408-4000
                                                                  FILING DATE: 06-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: PORCHON, COLETTE TITLE OF INVENTION: Nucleoti TITLE OF INVENTION: Hepatiti TITLE OF INVENTION: Applicat
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Finnegan, Henderson, ADDRESSEE: Dunner STREET: 1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 05286-0001-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/0
FILING DATE: 18-MAR-1993
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                                                                                                                                                                                                                                                                                                                                       COUNTRY:
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66.7%;
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                                     05286-0001-00000
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US-08-487-231-46
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                                           Query Match
Best Local
                              Matches
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                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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APPLICANT: Brechot
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 05
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                APPLICATION NUMBER: FR 9: FILING DATE: 06-JUN-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/965,285
FILING DATE: 18-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS
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TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                   NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
                                         Local
                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
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                                                                                                                                        LENGTH:
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                           Similarity 4; Conserv
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GY: linear
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                           Conservative
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SYSTEM: PC-DOS/MS-DOS
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                                                                                               peptide
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                                        70.0%;
                                                                                                                                                                                                                                                                                              FR 91 06
                                                                                                                                                                                                                                                                                                                                                                                                        US/08/487,231
                                                                                                                                                                     46:
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                          Score 28; DB
Pred. No. 2.2e
1; Mismatches
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Pred. No.
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                                       DB 2;
2.2e+02;
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                                                    Length 189;
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                           Indels
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US-09-045-973-3
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US-09-201-912-46
                                                                                                                                           Sequence 3, Application Patent No. 6165767
                                                                                                                                                                                                                                                                                                             Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 202-408-4400 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                             APPLICANT: Lal, Preeti
APPLICANT: Yue, Henry
APPLICANT: Corley, Neil C.
APPLICANT: Guegler, Karl J.
APPLICANT: Baughn, Mariah
                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 189 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
               APPLICANT: Baughn, Mariah
TITLE OF INVENTION: PROTEIN PHOSPHATASE RELATED MOLECULES
NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                           Local Similarity les 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Meyers, Kenneth REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
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ADDRESSEE: Dunner
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SYSTEM: PC-DOS/MS-DOS
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ER: 05286-0001-00000
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ADDRESSEE: Incyte Pharmaceuticals, Inc.

STRETT: 3174 Porter Drive
CITY: Palo Alto
STATE: California
COUNTRY: USA
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Sequence 49, Appl Sequence 51, Appl Sequence 30, Appl Sequence 30, Appl Sequence 70, Appl Sequence 723, App Sequence 723, App Sequence 6003, App Sequence 666, Appl Sequence 957, App Sequence 957, App Sequence 957, App Sequence 957, App Sequence 957, App Sequence 957, App Sequence 140, Appl Sequence 1830, Appl Sequence 11, Appl Sequence 11, Appl Sequence 11, Appl Sequence 42, Appl Sequence 23, Appl Sequence 24, Appl Sequence 27, Appl Sequenc

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397.148 Million cell updates/sec
               Sequence 2, Appli
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Sequence 34, Appl
Sequence 54, Appl
Sequence 655, Ap
Sequence 157, App
Sequence 157, App
Sequence 172, App
Sequence 172, App
Sequence 516, Appl
Sequence 6127, App
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Sequence 397, App
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Patent No. US20020164711A1
GENERAL INFORMATION:
APPLICANT: TSUJIMOTO, Masafur
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444933544
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4449355444
                                                                            COUNTRY: United States

ZIP: 22313-1404

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/91,442
FILING DATE: 07-Mart-2002
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
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APPLICATION DATA:
                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane,
                                                                                                                                                                                                                                    NUMBER
      APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                         STREET: P.O. Box 1404
                                                                                                                                                                                                                                   YAMAICHI, KOZO
YAMAGUCHI, NO. US20020164711A1om1
OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
R OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                             MIURA, Kenju
ISHIDA; No. US20020164711Aluhiro
                                                                                                                                                                                                                                                                                                                             TSUJIMOTO, Masafumi
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NAKAZATO, Hiroshi
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US-09-738-626-6003
US-10-156-761-14022
US-09-9125-299-957
US-10-166-698-5254
US-09-9125-299-957
US-10-142-231-63
US-10-156-761-13830
US-09-919-901-11
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US-09-899-046-30

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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tent No. US200:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                APPLICATION NUMBER: JP 4-FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: YAMAGUCHI, NO. US20010026931A10m1
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                       APPLICATION NUMBER: US 08/091,028 FILING DATE: 14-JUL-1993
                   APPLICATION NUMBER:
                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 08-AU
                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn
                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: United States ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEFAX: (703) 836-2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: peptid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT
                                                                                                                                                                                                                                                                                                                                                                                                                      SSEE: Burns, Doane, Swecker & Mathis T: P.O. Box 1404
Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7; . Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                    Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KURIHARA, Tatsuya
YAMAICHI, Kozo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TSUROUOKA, No. US20010026931A1uo NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIURA, Kenju
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SHIDA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUJIMOTO, Masafumi
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UMBER: JP 6-067339
04-MAR-1993
                                                                                                                                                                                                                              08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DATE: 04-MAR-1993
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                                                                                                                                                                                                                                                                              Release #1.0; Version #1.30
                                                                     JP 4-212305
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Pred. No. 4e+05;
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US-10-091-442-34
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GENERAL INFORMATION:
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Matches
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REFERENCE/DOCKET NUMBER: 001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
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STRANDEDNESS: sin
TOPOLOGY: linear
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REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                ATTORNEY/AGENT INFORMATION:
NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/140,719
FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/091,442
ETLING DATE: 07-Mar-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker & Mathis
STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YAMAGUCHI, NO. US20020164711Alomi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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                                                                                                                                              APPLICATION NUMBER: JP 4-212305 FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/474,661 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Alexandria
STATE: Virginia
                                                                                                           APPLICATION NUMBER: JP 6 FILING DATE: 04-MAR-1993
                                                                                                                                                                                  FILING DATE: 14-JUL-1993
                                                                                                                                                                                                   APPLICATION NUMBER: US
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YAMAICHI, Kozo
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NAKAZATO, Hiroshi
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Pred. No.
                                                                                                                             6-067339
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SEQUENCE DESCRIPTION: SEQ ID NO: US-10-091-442-34
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Best Local Similarity
"---hes 7; Conserv
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                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
              TELEFAX: (703) 836-202:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                               NAME: MCGOVAN, MAICOLM K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAGUCHI, NO. US20010026931A10m1
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
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                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 08-AUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: United States ZIP: 22313-1404
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US20010026931A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Burns, Doane, Swecker & Mathis
P.O. Box 1404
                                                               (703) 836-6620
(703) 836-2021
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TSUROUOKA, NO. US20010026931Aluo
NAKAZATO, Hiroshi
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; ORGANISM: Homo sapiens
US-09-764-853-656
                                            SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 656
LENGTH: 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 5215
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                               TYPE: PRT
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RESULT 6
US-09-764-853-656
: Sequence 656, Application US/09764853
: Patent No. US20020090672A1
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; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-09-738-626-5215
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                    GENERAL INFORMATION:
APPLICANT: ROSen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PJ206
FILE REFERENCE: PJ206
CURRENT APPLICATION NUMBER: US/09/764,853
CURRENT FILING DATE: 2001-01-17
CURRENT FILING DATE: 2001-01-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: JP 99/377484
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: JP 00/280988
PRIOR APPLICATION NUMBER: JP 00/280988
PRIOR FILING DATE: 2000-08-03
Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES FILE REFERENCE: 249-125 CURRENT APPLICATION NUMBER: US/09/738,626 CURRENT FILING DATE: 2000-12-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 7059 SOFTWARE: PatentIn ver. 3.
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                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                           30 WQNALTK 36
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OZAKI, AKIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YOKOI, HARUHIKO
TATEISHI, NAOKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HAYASHI, MIKII
OCHIAI, KEIKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MIZOGUCHI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SENOH, AKIHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANDO,
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Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                    Mismatches
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Best Local S
Matches S
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CURRENT FILING DATE: 2001-01-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICANT: Rosen et al.
ITLE OF INVENTION: Nucleic Acids, Proteins,
 DR APPLICATION NUMBER: 60/236,369
R FILLING DATE: 2000-09-29
DR APPLICATION NUMBER: 60/224,519
DR FILLING DATE: 2000-08-14
DR APPLICATION NUMBER: 60/220,964
DR FILLING DATE: 2000-07-26
DR FILLING DATE: 2000-10-20
DR FILLING DATE: 2000-10-20
DR FILLING DATE: 2000-10-20
DR FILLING DATE: 2000-10-20
DR APPLICATION NUMBER: 60/249,299
DR APPLICATION NUMBER: 60/249,299
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R APPLICATION UNMBER: 60/22
R FILING DATE: 2000-08-22
R APPLICATION NUMBER: 60/21
R APPLICATION NUMBER: 60/21
R FILING DATE: 2000-07-07
R APPLICATION NUMBER: 60/21
R FILING DATE: 2000-08-14
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APPLICATION NUMBER: 60/
FILING DATE: 2000-08-30
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APPLICATION NUMBER: 60/225,758
FILING DATE: 2000-08-14
APPLICATION NUMBER: 60/220,963
FILING DATE: 2000-07-26
                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/234,274 FILING DATE: 2000-09-21 APPLICATION NUMBER: 60/234,223
                                                                                                                                                      FILING DATE: 2000-08-14
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FILING DATE: 2000-08-14
                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/216,880 FILING DATE: 2000-07-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/225,757
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FILING DATE: 2000-07-14
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5; Conserv
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FILING DATE: 2000-10-02
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FILING DATE: 2000-08-22
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FILING DATE: 2000-08-14
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FILING DATE: 2000-10-20
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APPLICATION NUMBER: 60/251,868
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FILING DATE: 2000-08-14
APPLICATION NUMBER: 60/249,218
FILING DATE: 2000-11-17

APPLICATION NUMBER:

APPLICATION NUMBER: 60/215,135

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BR FILING DATE: 2000-11-17

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DR APPLICATION NUMBER: 60/249,215

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DR APPLICATION NUMBER: 60/249,264

DR APPLICATION NUMBER: 60/249,264

DR APPLICATION NUMBER: 60/249,214

DR APPLICATION NUMBER: 60/249,214

DR FILING DATE: 2000-11-17

DR APPLICATION NUMBER: 60/249,297

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APPLICATION NUMBER:
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FILING DATE: 2000-11-17
APPLICATION NUMBER: 60/249,245
FILING DATE: 2000-11-17
                                                                                                                                                                                                                   APPLICATION NUMBER: 60/246,475
                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 2000-09-14
APPLICATION NUMBER: 60/232,401
FILING DATE: 2000-09-14
APPLICATION NUMBER: 60/241,808
FILING DATE: 2000-10-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/231,242 FILING DATE: 2000-09-08 APPLICATION NUMBER: 60/232,081
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FILING DATE: 2000-11-17
APPLICATION NUMBER: 60/249,213
FILING DATE: 2000-11-17
                                                                                                                                                                                                                                             FILING DATE: 2000-10-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/232,397 FILING DATE: 2000-09-14
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FILING DATE: 2000-09-08
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                                                                                                                                                                                                                                                                                         FILING DATE: 2000-10-20
                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/241,786
                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/241,826 FILING DATE: 2000-10-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/232,399
                                                                                                                                                                                                                                                               APPLICATION NUMBER:
  1 WQSAFTK 7
                                                              Similarity
5; Conserv
                                                                  Conservative
                                                                                                                                                                            2000-11-08
NUMBER: 60/231,243
                                                                                     77.58;
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                                                                Score 31; DB
Pred. No. 1e+C
0; Mismatches
                                                                  0
                                                                                     DB 9;
1e+02;
                                                                <u>ب</u>
                                                                                                         Length 194;
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                                                                                                                          PRIOR FILING DATE: 1997-12-18
PRIOR APPLICATION NUMBER: 60/068,064
PRIOR FILING DATE: 1997-12-18
PRIOR APPLICATION NUMBER: 60/068,054
PRIOR FILING DATE: 1997-12-18
PRIOR APPLICATION NUMBER: 60/068,008
PRIOR APPLICATION NUMBER: 60/068,008
PRIOR FILING DATE: 1997-12-18
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Matches
NUMBER OF SEQ ID NOS: 672
SOFTWARE: PatentIn Ver. 2
SEQ ID NO 172
LENGTH: 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/097,065 CURRENT FILING DATE: 2002-03-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: 110 FILE REFERENCE: PZ021P1
                                                                                     PRIOR APPLICATION NUMBER: 60/068,365 PRIOR FILING DATE: 1997-12-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/068,007
FILING DATE: 1997-12-18
APPLICATION NUMBER: 60/068,057
FILING DATE: 1997-12-18
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APPLICATION NUMBER: 60/070,923
FILING DATE: 1997-12-18
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FILING DATE: 1997-12-19
APPLICATION NUMBER: 60/068,368
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APPLICATION NUMBER: 60/068,169
FILING DATE: 1997-12-19
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APPLICATION NUMBER: 60/068,369
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                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/068,053
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US20030055236A1 Paul A.

Human Secreted Proteins

1997-12-19

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NUMBER OF SEQ ID NOS: 157
SEQ ID NO 65
LENGTH: 978
TYPE: PRT
ORGANISM: Chlamydia pneumoniae
US-10-007-693-65
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                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 65, Application US/10007693 Patent No. US20020146776A1
                                                                                                                                                                                                                                              APPLICANT: Probst, Feter
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR TREATMENT
TITLE OF INVENTION: AND DIAGNOSIS OF CHLAMYDIAL INFECTS
FILE REFERENCE: 210121.515C2
CURRENT APPLICATION NUMBER: US/10/007,693
CURRENT FILLING DATE: 2001-12-05
NUMBER OF SEQ'ID NOS: 157
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Bhatia, Ajay APPLICANT: Probst, Pet
                                                                         Local Similarity 71.4 hes 5; Conservative
854 WQSKFTE 860
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                                   1 WQSAFTK 7
                                                                                         77.5%;
71.4%;
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                                                                       Score 31; DB 12;
Pred. No. 5.2e+02;
1; Mismatches 1
                                                                                                             Length 978;
                                                                           Indels
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; ORGANISM: Homo sapiens
US-10-225-567A-516
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY: SITE
; LOCATION: (195)
; OTHER INFORMATION: Xaa equals stop translation
US-10-097-065-172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                         Sequence 6127, Application US/09738626 Publication No. US20020197605A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 516
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                                                             CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
                                                                                                                                                              APPLICANT:
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Burmer, Glenna C.
APPLICANT: Roush, Christine L.
TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS
FILE REFERENCE: 1920-4-4
PRIOR FILING DATE: 2000-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/225,567A CURRENT FILING DATE: 2001-12-19 PRIOR APPLICATION NUMBER: 60/257,144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: LifeSpan Biosciences APPLICANT: Brown, Joseph P.
                               PRIOR APPLICATION NUMBER: JP 99/377484 PRIOR FILING DATE: 1999-12-16
                                                                                              APPLICANT: OZAKI, AKIO
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2000-12-19
NUMBER OF SEQ ID NOS: 2292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.1
                                                                                                                                                 PPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH: 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     178 WMSMFTK 184
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 WQSAFT 6
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5; Conservative
                                                                                                                                           YOKOI, HARUHIKO
TATEISHI, NAOKO
SENOH, AKIHIRO
IKEDA, MASATO
                                                                                                                                                                                                                                                                          NAKAGAWA, SATOSHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                         HAYASHI, MIKIRO
OCHIAI, KEIKO
                                                                                                                                                                                                                                           ANDO,
                                                                                                                                                                                                                                                         MIZOGUCHI, HIROSHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brown, Joseph P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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83.3%;
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71.4%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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1.6e+02;
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                                             SOFTWARE: PE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
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Best Local
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                                                                               2000-05-17; 2000-05-17
NUMBER OF SEQ ID NOS: 159
                                                                                                                 60/205,324; 60/205,286
PRIOR FILING DATE: 2000-1
                                                                                                                                              PRIOR APPLICATION NUMBER: 60/185,215; 60/185,216; 60/205,232; 60/205,323; 60/205,2
                                                                                                                                                                   CURRENT FILING DATE:
                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/204,887
                                                                                                                                                                                                APPLICANT: HODGSON, David M.:
APPLICANT: LINCOLN, Stephen E.
TITLE OF INVENTION: SECRETYORY MOLECULES
FILE REFERENCE: PT-1134 PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2000-08-03 NUMBER OF SEQ ID NOS: 7059
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TYPE: PRT
ORGANISM: Homo sapiens
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                                  ENGTH: 145
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nes 5; Conserv
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                                                                                                                                                                                                                                                                COHEN, Howard J.
                                                                                                                                                                                                                                                                                            YU, Jimmy Y.
BRADLEY, Diana L.
BRATCHER, Shawn R.
                                                                                                                                                                                                                                                                              CHEN, Wensheng
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D'SA, Steven A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FLORES, Vincent FONG, Willy T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DANIELS, Susan E. DUFOUR, Gerard E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SHAH, Purvi
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SPIRO, Peter A.
                                                                                                                                                                                                                                                                                                                                                                DAFFO, Abel
WRIGHT, Rachel J.
                                                                                                                                                                                                                                                                                                                                                                                                              RUSSO, Frank D.
                                                                                                                                                                                                                                                                                                                                                                                                STOCKDREHER, Theresa K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                ROSEBERRY, Ann M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JONES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HILLMAN, Jennifer L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GREENAWALT, Lila B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AMSHEY, Stefan
                                                                                                                                                                                                                                                                                                                                                AP, Pierre E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Christopher R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anissa L.
                                                                                                                2000-02-24; 2000-02-24; 2000-05-16; 2000-05-17; 2000-05-17;
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                                                                                                                                                                   2002-08-23
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. 5.8e+02;
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NAME/KEY: misc_feature

FEATURE:

; OTHER INFORMATION: Incyte ID NO. US20030124569A1 LI:221836.3.orf2:2000MAY01 US-10-204-887-158

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RESULT 14
US-09-738-626-4605
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US-09-738-626-6151
APPLICANT: MIXOGUCHI, HIROSHI
APPLICANT: HAYASHI, MIKIRO
APPLICANT: CHAIAI, KEIKO
APPLICANT: YOKOI, HARUHIKO
APPLICANT: TATEISHI, NAKO
APPLICANT: SENOH, AKIHIRO
APPLICANT: IKEDA, WASATO
APPLICANT: OZAKI, AKIO
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
PRIOR APPLICATION NUMBER: JP 99/377484
PRIOR FILLING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: JP 00/280988
PRIOR FILING DATE: 2000-08-03
NUMBER OF SEQ ID NOS: 7059
                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                              Sequence 4605, Application US/09738626 Publication No. US20020197605A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn ver. 3.0 SEQ ID NO 6151
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TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
                                                                                                                                                                                                                          APPLICANT: NAKAGAWA, SATOSHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: NAKAGAWA, SATOSHI
APPLICANT: MIZOGUCHI, HIROSI
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OCHIAI, KEIKO
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Pred. No. 2.2e+02;
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Pred. No. 1.9e+02;
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APPLICANT: Benson, Darin R.

APPLICANT: Secrist, Heather
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.475C10
CURRENT APPLICATION UMBER: US/09/854,133
CURRENT FILING DATE: 2001-05-11
CURRENT FILING DATE: 2001-05-11
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 397
LENGTH: 307
TYPE: TOTAL
Search completed: July 11, Job time: 3.05198 secs
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PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: JP 00/280988
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187 WQSAYSE 193
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on No. US20020183499A1
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Henderson, Robert A.
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Pred. No. 4e+02;
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mobilization prote
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RESULT 2 T40288 hypothetical protein SPBC354.08c - fission C;Species: Schlzosaccharcmyces pombe C;Date: 03-Dec-1999 #sequence_revision 03-D C;Accession: T40288 R;Wood, V.; Rajandream, M.A.; Barrell, B.G. submitted to the EMBL Data Library, March 1 A;Reference number: Z21918 A;Accession: T40288 A;Status: preliminary; translated from GB/E A;Molecule type: DNA A;Residues: 1-865 <moo> A;Cross-references: EMBL:AL022071; PIDN:CAA A;Experimental source: Strain 972h-; cosmid C;Genetics: A;Map position: 2 A;Introns: 58/2</moo>	1 WQSAFTK 7 : : 160 WQTAFTQ 166	milarity 71.4%; Pre	APOO1509; GB strain C-125	orter chrA [imported] - Be llus halodurans 2000 #sequence_revision 01 3721 akasone, K.; Takaki, Y.; N es. 28, 4317-4331, 2000 te genome sequence of the te genome sequence of the ber: A83650; MUID:20512583	ALIGNMENTS RESULT 1 F83721	30 75.0 273 2 AF2025 31 30 75.0 275 2 S75994 32 30 75.0 296 2 S72601 33 30 75.0 317 2 D84098 34 30 75.0 317 2 D84098 35 30 75.0 324 2 C95864 36 30 75.0 337 2 G97742 37 30 75.0 351 1 XUBPB4 37 30 75.0 415 2 D88940 38 30 75.0 415 2 D88940 40 30 75.0 429 1 AJFB0D 40 30 75.0 429 2 T14292 41 30 75.0 494 2 E70352 42 30 75.0 494 2 E70352 43 30 75.0 504 2 S75597 44 30 75.0 504 2 T49355 45 30 75.0 506 2 T40379
fission yeast (Schizosaccharomyces pombe) e		Otern A re 33; DB 2; Length 397; d. No. 28; Mismatches 0; Indels 0; Gaps 0;	004; NID:g10173176; PIDN:BAB04293.1; GSPDB:G	acillus halodurans (strain C-125) 1-Dec-2000 #text_change 15-Jun-2001 Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; H' alkaliphilic bacterium Bacillus halodurans a 2; PMID:11058132	MENTS	hypothetical prote hypothetical prote hypothetical prote hypothetical prote hypothetical prote conserved hypothet cytochrome c oxida DNA beta-glucosylt protein CO5E4.1 [1 probable membrane glutamate-ammonia glutamate-ammonia hypothetical prote anthranilate synth hypothetical prote related to protein hypothetical prote

Query Match 82.5%; Best Local Similarity 71.4%; Matches 5; Conservative

; Score 33; DB ; Pred. No. 65; 1; Mismatches

2;

Length 865; Indels

0;

Gaps

0,

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RESULT
C69451
                                                                                                                               cationic amino acid transporter (cat-1) homolog - Archaeoglobus fulgidus C;SpecLes: Archaeoglobus fulgidus C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 22-Oct-1999 C;Accession: C69451
A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Smith, H.O.; Woese, C.R.; Venter, J.C. A;Title: The complete genome sequence of the hyperth
                                                      Glodek, A.; Zhou, L.; Ov
Nature 390, 364-370, 1997
                                                                                           R;Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; D.; Fleischmann, R.D.; Quackenbush, J.; Lee, N.H.; Sutton, G.G.; Gill, S.; Kirkness,
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A;Title: Characterization of the ColE1 mobilization region
A;Reference number: JQ0389; MUID:89364735; PMID:2671664
A;Accession: S04795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mobilization protein mobD - Escherichia coli plasmid ColK
C;Species: Escherichia coli
C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change
C;Accession: S04795
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B45956
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A; Residués: 1-77
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A; Residues: 1-880 <MAC>
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A;Title: Nucleotide sequences of Saccharomycopsis fibuligera
A;Reference number: A45956; MUID:89133518; PMID:3146949
A;Accession: B45956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Saccharomycopsis fibuligera
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 24-Sep-1999
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C;Superfamily: beta-glucosidase 1
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Best Local
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Saccharomycopsis fibuligera
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67;
hyperthermophilic,
                                                                       J.D.; Weidman,
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A:Title: Comparison of whole genome sequences of chlamydia pneumoniae J138.
A;Reference number: A86491; MUID:20330349; PMID:10871362
A;Accession: F86548
                                                                                                                                                                                                                                                                                                               polymorphic outer membrane protein E family [imported] - Chlamydophila pneumoniae C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 02-Mar-2001 C;Accession: F86548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: Yersinia pestis
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Nov-2001
C;Accession: AD0159
                                                                                                        A; Gene:
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C; Superfamily:
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il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.;
Nature 413, 523-527, 2001
                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-938 <STO>
                                                                                                                                                                                                                                                                             R;Shirai, M.; Hirakawa, H.; Kimoto, M.; Tabuchi, M.; Kishi, Nucleic Acids Res. 28, 2311-2314, 2000
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A; Residues: 1-837 < KUR>
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A; Residues: 1-736 <KLE>
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Best Local
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83.3%;
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                                                    Score 32;
Pred. No. 1
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Pred. No. 1e+02;
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i; Mismatches
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Stevens, K.; W
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                                                                  Length 938;
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Davies, R.M.; Davis, P.; Dougan, G
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A; MOLUCULE CYPE. C. A. A. RESIGNES: 1-112 <SIM>
A; Residues: 1-112 <SIM>
A; Cross-references: GB:AE003926; GB:AE003849; NID:g9105771; PIDN:AAF83677.1; GSPDB:GN001
A; Expectimental source: strain 9a5c
R; Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; A
Briones, M.R. S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H
as-Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S.
submitted to GenBank, June 2000
A; Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohn
J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laigr
Chado, M.A.; Madeira, A.M.B. N.; Madeira, H.M. F.; Marino, C.L.; Marques, M.V.; Martins, F.
A; Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.;
F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A
Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak
A; Muthors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silvei, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z
M.; Tsuhako, M.H.; Valladda, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z
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A;Title: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia pneumoniae AR39.
A;Reference number: A81500; MUID:20150255; PMID:10684935
A;Molocalia trachomatis MoPn and Chlamydia pneumoniae AR39.
A;Molocalia trachomatis MoPn and Chlamydia pneumoniae AR39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypothetical protein xF0867 [imported] - Xylella fastidiosa (strain 9a5c) C;Specles: Xylella fastidiosa C;Specles: Xylella fastidiosa C;Specles: Xylella fastidiosa C;Date: 18-Aug:2000 #sequence_revision 20-Aug-2000 #text_change 20-Aug-2000 C;Accession: H82752 R;anonymous. The Xylella fastidiosa Consortium of the Organization for Nucl. Nature 406, 151-157, 2000 Mature 406, 151-157, 2000 A;Title: The genome sequence of the plant pathogen Xylella fastidiosa. A;Reference number: A82515; MUID:20365717; PMID:10910347 A;Note: for a complete list of authors see reference number A59328 below
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A;Cross-references: GB:AE002190; GB:AE002161; NID:g7189209; PIDN:AAF38143.1; PID:g718921
A;Experimental source: strain AR39, HL cells
C;Genetics:
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A;Accession: H72074
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                                                                A;Contents: annotation C;Genetics: A;Gene: XF0867
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A; Residues: 1-938 <ARN>
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5; Conserv
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Score

hypothetical

protein HI0461 -

Haemophilus influenzae (strain Rd KW20)

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permease [imported] - Agrobacterium tumefaciens (strain C58, Dupont)
C;Species: Agrobacterium tumefaciens
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 11-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Goodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D. Science 294, 2323-2328, 2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
H97480
                                                                                                                                                                                                 A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-289 < KUR>
A;Cross-references: GB:AE008688; PIDN:AAL42006.1; PID:g17739380; GSPDB:GN00186
A;Experimental source: strain C58 (Dupont)
                                                                                                                                                                                                                                                                                                                                                     A; Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kam ster, E.W.
                                                                                                                                                                                                                                                                                                                                                                                        ; Karp, P.; Romero, P.; Zhang, S. Science 294, 2317-2323, 2001
                                                                                                                                                                                                                                                                                                                                                                                                                           C;Accession: AH2698
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, erage, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutyavin, T.; Levy, R.; Li, N
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A; Residues: 1-289 < KUR>
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A; Accession: H97480
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                                                                                                                                                                                                                                                                                                                A; Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58 A; Reference number: AB2577; PMID:11743193
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probable integral membrane protein NMA0732 [imported] - Neisseria meningitidis (strain C;Species: Neisseria meningitidis C;Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change 02-Feb-2001 C;Accession: F81916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R:Tettelin, H.; Saunders, N.J.; Heidelberg, J.; Jeffries, A.C.; Nelson, Hickey, E.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Fleischmann, R.D.; ri, H.; Qin, H.; Vamathevan, J.; Gill, J.; Scarlato, V.; Masignani, V.; Science 287, 1809-1815, 2000
A:Authors: Grandi, G.; Sun, L.; Smith, H.O.; Fraser, C.M.; Moxon, E.R.; A;Title: Complete genome sequence of Neisseria meningitidis serogroup B A;Reference number: A81000; MUID:20175755; pMID:10710307
A;Accession: G81185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13

681185
hypothetical protein NMB0552 [imported] - Neisseria meningitidis (strain MC58 serogroup C;Species: Neisseria meningitidis
C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 19-Jan-2001
C;Accession: G81185
                                                                                                                                                             R;Parkhill, J.; Achtman, M.; James, K.D.; Bentley, Holroyd, S.; Jagels, K.; Leather, S.; Moule, S.; Nature 404, 502-506, 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Haemophilus influenzae
C;Decies: Haemophilus influenzae
C;Decies: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 29-Sep-1999
C;Accession: I64069
R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage, Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman, D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M. Science 269, 496-512, 1995
    A;Residues: 1-357 <PAR>
A;Cross-references: GB:
                                                                                           A;Reference number: A81775;
A;Accession: F81916
                                                                                                            A; Title: Complete DNA sequence of a serogroup A strain of A; Reference number: A81775; MUID:20222556; PMID:10761919
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A; Residues: 1-357 <TET>
A; Cress-references: GB: J
A; Experimental source:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Authors: Gnehm, C.I.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Ve A;Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd. A;Reference number: A64000; MUID:95350630; PMID:7542800
                            A;Molecule type:
A;Residues: 1-357
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A; Residues: 1-291 <TIGR>
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A;Accession: I64069
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ce: serogroup
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71.4%;
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  GB:AL157959;
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NID:g7379424; PIDN:CAB84016.1; PID:g737945
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Mungall, K.; Quail,
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M.A.;
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strain MC58.
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Search completed: July 11, Job time: 4.51164 secs

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R;Chissoe, S.; Sansone, u.
submitted to the EMBL Data Library, Decemb
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                                                                                                                                                                                                                                                                                                                      C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision
C;Accession: T32652
 В
                         Q
                                                                                                             A; Introns: 42/3; 104/3; 133/3; 164/3; 213/3; 276/3; 336/3
                                                                                                                                                                        A; Experimental source: strain
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A;Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                              A; Map position:
                                                                                                                                           A; Gene: CESP:F39C12.3
                                                                                                                                                        C; Genetics:
                                                                                                                                                                                      A; Cross-references:
                                                                                                                                                                                                    A; Residues: 1-427 <CHI>
                                                                                                                                                                                                                 A; Molecule type: DNA
                                                                                                                                                                                                                                                            A; Description: The sequence A; Reference number: Z21206
                                                                                                                                                                                                                                                                                                                                                               hypothetical protein F39C12.3 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: NMA0732
                                                      Query Match
Best Local S
Matches 5
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Best Local :
230 WQNALTK 236
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ce: strain Bristol N2; clone F39C12
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                                                                     Score 31; DB Pred. No. 81;
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Pred. No.
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OM protein - protein search, using sw model
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July 11, 2003, 11:43:41; Search time 0.669439 Seconds (without alignments) 433.698 Million cell updates/sec
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Title: Perfect score: Sequence: Scoring table: US-10-091-442-2 40 1 WQSAFTK 7

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters:

112892

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_40:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

999 999 999	225 226 276	1100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Result
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	MRED ECOLI	YIM9_YEAST	YBBA_SCHPO	PHY1_TOBAC	YD5A_SCHPO	GREA_CHLMU	TGM3_HUMAN	VATI_PYRAB	V70K_PLRVW	V70K_PLRV1	YE06_SCHPO	FZOA_XENLA
	_	P40468 saccharomyc	060072 schizosacch	P33530 nicotiana t	Q10313 schizosacch	Q9plu1 chlamydia m	Q08188 homo sapien	Q9uxu2 pyrococcus	Pl1622 potato leaf		013803 schizosacch	Q9deb5 xenopus lae

ALIGNMENTS

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	88888888	CCCCCCC	R R A A A A	R R R R R R R R R R R R R R R R R R R	RESULT SPB7_H SP	
EMBL; D88575; BAA31232.1; EMBL; AF027866; AAC64506.1; HSSP; P05619; 11LE. Genew; HGNC:13902; SERPINB7. MIN: 603357; InterPro; IPR000215; Serpin. Pfam; PF00079; Serpin; 1. SMART; SM00093; SERPIN; 1. PROSITE; PS00284; SERPIN; 1.	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).	Clin. Invest. FUNCTION: Mig proteases. Mi its action as SUBCELLULAR L TISSUE SPECIF SIMILARITY: B	SEQUENCE FROM N.A. SEQUENCE FROM N.A. TISSUE-Mesangial cells; MEDLINE-98376492; PubMed-9710452; Miyata T., Nangaku M., Suzuki D., Inagi R., Uragami K., Sakai H., Okubo K., Kurokawa K.; Okubo K., Kurokawa K.; Ta mesangium-predominant gene, megsin, is a new serpin upregulated in Ta neshrogathy."	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLING-97326116; PubMed-9182567; TSUJimoto M., Tsuruoka N., Ishida N., Kurihara T., Iwasa F., Tsujimoto M., Tsuruoka N., Ishida N., Kurihara T., Iwasa F., Yamashiro K., Rogi T., Kodama S., Katsuragi N., Adachi M., Katayama T., Nakao M., Yamaichi K., Hashino J., Haruyama M., Miura K., Rakanishi T., Nakazato H., Teramura M., Mizoguchi H., Yamaguchi N.; "Purification, cDNA cloning, and characterization of a new serpin with megakaryocyte maturation activity."; J. Biol. Chem. 272:15373-15380(1997).	_HUMAN STANDARD; PRT; 380 AA. SPB7_HUMAN STANDARD; PRT; 380 AA. O75635; 15-JUN-2002 (Rel. 41, Created) 15-JUN-2002 (Rel. 41, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) SERPINB7. Megsin (TP55) (Serpin B7). SERPINB7. HOmo sapiens (Human). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBL_TaxiD=9606;	

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RESULT 2
BGL2_SAC
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P22507
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P22507;
P22507;
Ol-AUG-1991 (Rel. 19, Created)
Ol-AUG-1991 (Rel. 19, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Beta-glucosidase 2 precursor (EC 3.2.1.21) (G
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ACT_SITE
                                                                                                                                                                                                                                                                                       InterPro: IPR002772; GH_3C.
InterPro: IPR001764; GH_3N.
Pfam; PF00933; Glyco_hydro_3; 1.
Pfam; PF01915; Glyco_hydro_3_C; 1.
PRINTS; PR00133; GLHYDRLASE3.
PROSITE; PS00775; GLYCOSYL_HYDROL_F3; 1.
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ACT_SITE
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-89133518; pubMed-3146949;
Machida M., Ohtsuki I., Fukui S., Yamashita I.;
"Nucleotide sequences of Saccharomycopsis fibuligera genes for
extracellular beta-glucosidases as expressed in Saccharomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BGL2.
Saccharomycopsis fibuligera (Yeast).
Saccharomycotina; Saccharomycotina; Saccharomycopsis.
                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; M22476; AAA34315.1; -. PIR; B45956; B45956.
                                                                                                                                                                                                                                                                            Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cerevisiae.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          tities requires a license agreement (See http://www.isb-sib.ch/announce/send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. Environ. Microbiol. 54:3147-3155(1988).
CATALYTIC ACTIVITY: Hydrolysis of terminal, non-
glucose residues with release of beta-D-glucose.
PATHWAY: Cellulose degradation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY: BELONGS TO FAMILY 3 OF GLYCOSYL HYDROLASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
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E 347 348 REACT
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9A2CDB6C63CFF605
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   C95061283090814C
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                      (GLCNAC
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FF605 CRC64;
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   CRC64;
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RESULT 3
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Best Local
                                                                                                                                          Histidine biosynthesis; Transferase; Aminotransferase
Pyridoxal phosphate; Complete proteome.
BINDING 220 PYRIDOXAL PHOSPHATE (BY
SEQUENCE 369 AA; 40710 MW; DCB23E0507165570 CRC64
                                                                                                                                                                                                                     InterPro; IPR004839; Aminotransf1/2.
InterPro; IPR001917; NHtransf_2.
Pfam; PF00155; aminotran_1_2; 1.
TIGRPAMS; TIGR01141; hisC; 1.
PROSITE; PS00599; AA_TRANSFER_CLASS_2; 1.
                                                                                                                                                                                                                                                                                                                                                use by non-profit institutions as lon-
modified and this statement is not remov-
entitles requires a license agreement (SS
or send an email to license@isb-sib.ch).
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"Complete genome structure of the nitrogen-fixing symbioti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
Histidinol-phosphate annotransferase
acetol-phosphate transaminase 3).
HISC3 OR MLR5786.
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MEDLINE=21082930;
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NCBI_TaxID=381;
                                                                                                                                                                                                                                                                                                                   EMBL;
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315
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ra Y., Sato S., Asamizu
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ima K., Kimura
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                                                                                                           Length 369;
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RESULT 4
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                                                                                          CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                            CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             intracellular association with macrophages.";
Moi. Microbiol. 8:311-324(1993).
-i- FUNCTION: INVOLVED IN THE EXPORT AND ASSEMBLY OF PSAA (PH 6)
FIMBRIAL SUBUNITS ACROSS THE OUTER MEMBRANE.
-i- SUBCELLULAR LOCATION: Integral membrane protein. Outer membrane
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                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; M86713; AAA27664.1; ALT_INIT PIR; S27749; S27749. PIR; S32928; S32928.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an
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Submitted (MAY-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yersinia pestis.
Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-93302507; PubMed-8100346;
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SIMILARITY: BELONGS TO THE FIMBRIAL EXPORT USHER FAMILY.
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AJ414147; CAC90135.1; -.
Similarity
5; Conserv
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                                                                                                                                                                                                                                                                                                                                                  00577; Usher; 1.
PS01151; FIMBRIAL_USHER; 1.
    Conservative
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OUTER MEMBRANE USHER PROTEIN PSAC.

OUTER MEMBRANE (IN REF. 1 AND 3).

OFRONGCYRRSOYIQLYPG -> SFVKMYDTGVHNI
V (IN REF. 3).
R -> A (IN REF. 1).
E -> K (IN REF. 1).
ETGQLLVQW -> KQGSYWCM (IN REF. 1).
MW; D901C236C012D82A CRC64;
Score 32;
Pred. No.
1; Mismatc
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Q56983;
PMP15 OR CPN0466 OR CP0286.
Chlamydia pneumoniae (Chlamydophila pneumoniae)
Bacteria; Chlamydiales; Chlamydiaceae; Chlamydo NCBI_TaxID=83558;
[1]
                                                                                                                                16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Probable outer membrane protein pmp15 precu
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infect. Immun. 64:2483-2489(1996).
infect. Immun. 64:2483-2489(1996).
infect. Immun. 64:2483-2489(1996).
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                                                                                                                                                                                                                                                                 Q9Z883;
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Yang Y., Merriam J.J., Mueller J., Isberg R.R.;
"The psa locus is responsible for thermoinducible binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Outer membrane usher protein psaC precursor.
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PROSITE; PS01151; FIMBRIAL_USHER; 1
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Bacteria; Proteobacteria; ga
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15-JUN-2002 (Rel. 41, Last sequence up. 15-JUN-2002 (Rel. 41, Last annotation)
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SIMILARITY: BELONGS TO THE FIMBRIAL EXPORT USHER FAMILY.
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837 AA;
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83.3%;
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Pred. No. 40;
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Fimbria; Transport; Signal
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Matches
          G2D1_HUMAN STANDARD; PRT; 959 AA.

G9UHL9; O95444; Q9UHK8; Q9UF91; Q8WVC4;

15-JUN-2002 (Rel. 41, Created)

15-JUN-2002 (Rel. 41, Last sequence update)

15-JUN-2002 (Rel. 41, Last annotation update)

15-JUN-2002 (Rel. 41, Last annotation update)

General transcription factor III-I repeat domain-containing protein

GTF2I repeat domain containing protein 1) (Muscle TFII-I repeat

domain-containing protein 1) (General transcription factor III)

domain-containing protein 1) (General transcription factor III)
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MEDININ-20150255; PubMed-10684935;
Read T.D., Brunham R.C., Shen C., Gill S.R., Heidelberg
White O., Hickey E.K., Peterson J., Utterback T., Berry
Linher K., Weidman J., Khouri H., Craven B., Bowman C.,
Gwinn M., Nelson W., DeBoy R., Kolonay J., McClarty G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            use
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-9920606; PubMed-10192388; Kalman S., Mitchell W., Marathe R., Lammel C., Fan J., Olinger L., Grimwood J., Davis R.W., Stephens R.S.; "Comparative genomes of Chlamydia pneumoniae and C. tra Nat. Genet. 21:385-389(1999).
 domain-containing muscle-fiber enhan
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Eisen J., Fraser C.M.;
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                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               e by non-profit institutions as long as its content is diffed and this statement is not removed. Usage by and fortitles requires a license agreement (See http://www.isb-sib.send an email to license@isb-sib.ch).
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AE002190;
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PF02415; DUF145; 1
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POTENTIAL.
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MEDLINE=99216421; PubMed=10198167;
Osborne L.R.; Campbell T., Daradich A., Scherer S.W., Tsui
"Identification of a putative transcription factor gene (WE
is commonly deleted in Williams-Beuren syndrome.";
Genomics 57:279-284(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. (ISOFORM 2).
TISSUE-MUSCLE;
MEDLINE-98449952; PubMed=9774679
O'Mahoney J.V., Guven K.L., Lin
Wade R.P., Hardeman E.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Franke Y., Peoples R.J., Francke U., 
"Identification of GTF2IRD1, a putative t 
the Willlams-Beuren syndrome deletion at 
Cytogenet. Cell Genet. 86:296-304(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
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MEDLINE=20044629; PubMed=10575229;
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Tassabehji M., Carette M., Wilmot
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              SUBCELLULAR LOCATION: ALTERNATIVE PRODUCTS:
                                           SUBUNIT: In C-terminus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          scription factor involved in skeletal muscle in patients with Williams syndrome."; Hum. Genet. 7:737-747(1999).
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LOCATION: Nuclear. PRODUCTS: 2 isofor alternative splici
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                                                                                                         01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Protein HI0461.
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DEVELOPMENTAL STAGE: Highly expressed in developing and regenerating muscles, at the time of myofiber diversification. DOMAIN: The N-terminal half may have an activating activity. DISEASE: Haploinsufficiency of GTF2IRD1 may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in Williams-Beuren syndrome (WBS), a rare developmental disorder. It is a contiguous gene deletion syndrome involving genes from chromosome band 7911 23.

SIMILARITY: BELONGS TO THE TFII-I FAMILY.

SIMILARITY: CONTAINS 5 GTF2I-LIKE REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; AF118270; AAD14687.2;
AF104923; AAD27668.1;
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.; AF156489; AAF17358.1;
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71.4%;
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GTE21 4.
GTE21 5.
NUCLEAR LOCALIZATION SIGNAL (FEBRACH)
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Pred. No. 47;
1; Mismatches
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MISSING: CYTOPLASMIC LOCALIZATION.
G -> S (IN REF. 1 AND 2).
R -> O (IN REF. 5).
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M -> V (IN DBSNP:2301895).
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-> Q (IN REF. 5).
7DA3097879701540
                                      subdivision; Pasteurellaceae;
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RESULT 9
FUS2_YEAST
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Best Local
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McKenney K., Sutton G., Fitzhugh W., Fields C.A., Gocayne J.D.,

Scott J.D., Shirley R., Liu L.-I., Glodek A., Kelley J.M.,

Weidman J.F., Phillips C.A., Spriggs T., Hedblom E., Cotton M.D.,

Utterback T.R., Hanna M.C., Nguyen D.T., Saudek D.M., Brandon R.C.,

Fine L.D., Fritchman J.L., Fuhrmann J.L., Geoghagen N.S.M.,

Gnehm C.L., McDonald L.A., Small K.V., Fraser C.M., Smith H.O.,

Venter J.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-Rd / KW20 / ATCC 51907;
MEDLINE-95350630; PubMed-7542800;
Fleischmann R.D., Adams M.D., Whi
                                                                          MEDLINE-96032260; pubMed-7559752;
Elion E.A., Trueheart J., Fink G.R.;
Fus2 localizes near the site of cell fusion and
cell fusion and nuclear alignment during zygote f
J. Cell Biol. 130:1283-1296(1995).
                                                                                                                                                                                                  Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycesaccharomycetales; Saccharomycetaceae; Saccharomyces
                                                                                                                                                                                                                                          FUS2_YEAST STANDARD; PRT; 6
Q05670; Q05023;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
Nuclear fusion protein FUS2.
FUS2 OR YMR232W OR YM9959.14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fentities requires a license agreement (See http://www.isb-sib
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-S288c / AB972;
Skelton J., Churcher C.I
Submitted (JUN-1995) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Complete proteome. SEQUENCE 291 AA;
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Gray C.
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                                                 SEQUENCE FROM N.A.
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                                                                                                                                                           SEQUENCE FROM N.A.
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en H., Takacs B., Evers S., Berndt C., Fountoulakis M.;
dimensional man
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     Barrell B.G., Rajandream M.A.,
e EMBL/GenBank/DDBJ databases.
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formation.";
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.A., Merrick J.M.,
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Best Local S
Matches
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Q927G4; Q9JQE9;
30-MAY-2000 (Rel. 39, Crea
30-MAY-2000 (Rel. 39, Last
16-OCT-2001 (Rel. 40, Last
Transcription elongation f
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EMBL; Z49939; CAA90203.1; -.
SGD; S0004845; FUS2;
InterPro; IPR001331; GDS_CDC24.
InterPro; IPR000219; RhoGEF.
SMART; SW00325; RhoGEF; 1.
PROSITE; PS00741; DH_1; FALSE_NEG
PROSITE; PS50010; DH_2; 1.
pneumoniae
Nucleic Aci
                                MEDLINE=20150255; PubMed=10684935;
Read T.D., Brunham R.C., Shen C., Gill S.R., Heidelberg
White O., Hickey E.K., Peterson J., Utterback T., Berry
Linher K., Weidman J., Khouri H., Craven B., Bowman C.,
Gwinn M., Nelson W., DeBoy R., Kolonay J., McClarty G.,
Eisen J., Fraser C.M.,
                                                                                                                                    Nat.
                                                                                                                                                     MEDLINE-99206606; PubMed=10192388;
Kalman S., Mitchell W., Marathe R., Lammel C., Fa Clinger L., Grimwood J., Davis R.W., Stephens R.S Clinger L., Grimwood J., Davis R.W., Stephens R.S Chiamydia pneumoniae and "Comparative genomes of Chiamydia pneumoniae and
                                                                                                                                                                                                                                                                                                                                                                               CHLPN
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                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                          SEQUENCE FROM N.A. STRAIN=CWL029;
                                                                                                                                                                                                                                                       Chlamydia pneumoniae (Chlamydophila pneumoniae). Bacteria; Chlamydiales; Chlamydiaceae; Chlamydophila
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                                                                                                            STRAIN-AR39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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           "Genome sequences of Chlamydia pneumoniae AR39.";
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by non-profit institutions as long as its content
ified and this statement is not removed. Usage by an
ities requires a license agreement (See http://www.isb-
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                                                                                                                                              Genet.
                                                                                                                                                                                                                                                                                                                                                                                                                               199
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5; Conser
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28:1397-1406(2000)
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L -> R (IN REF. 1).

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HDTIECILLNYIKVFLKYLEIIAGGKKYLQKDLENMSLNDS

1ATGQIKMLDILQCYSKSRYMTKRMVRKDWFFFDDFSGSRV
VRKLFEL -> PRYYRMYLVELYQSLLKIFGNHCWWKKIPA
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Pred. No.
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                                             J.F.,
K., Bass
Dodson R.
Salzberg
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RESULT 11
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A Shiba T., Ishii K., Hattori M., Kuhara S., Nakazawa T.;

Tomparison of whole genome sequences of Chlamydia pneumoniae J138

RT from Japan and CWLO29 from USA.";

Nucleic Acids Res. 28:2311-2314 (2000).

LONGATION PAST TEMPLATE ENCODED ARRESTING SITES. THE ARRESTING

C FUNCTION PAST TEMPLATE ENCODED ARRESTING SITES. THE ARRESTING

C ELONGATION PAST TEMPLATE TRAPPING A CERTAIN FRACTION

C SITES IN DNA HAVE THE PROPERTY OF TRASPING A CERTAIN FRACTION

C OF ELONGATING RNA POLYMERASES THAT PASS THROUGH, RESULTING IN

C OF ELONGATION FRAM THE ROPERTY OF TRASPENGE TRANSCRIPT BY

C LOCKED TERNARY COMPLEXES. CLEAVAGE OF THE NASCENT TRANSCRIPT BY

C LOCKED TERNARY COMPLEXES. CLEAVAGE OF THE RESUMPTION OF

C CLEAVAGE FACTORS SUCH AS GREA OR GREB ALLOWS THE RESUMPTION OF

C ELONGATION FROM THE NEW 3'TERMINUS. GREA RELEASES SEQUENCES OF

C TO 3 NUCLEOTIDES (BY SIMILARITY).

C -1- SIMILARITY: BELONGS TO THE GREA/GREB FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
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Q9Z895; Q9RB63;
16-OCT-2001 (Rel
16-OCT-2001 (Rel
16-OCT-2001 (Rel
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SEQUENCE FRO
STRAIN-J138;
MEDLINE-99206606; PubMed-10192388; Kalman S., Mitchell W., Marathe R., Lammel C., Fan J., Olinger L., Grimwood J., Davis R.W., Stephens R.S.; "Comparative genomes of Chlamydia pneumoniae and C. tra Nat. Genet. 21:385-389(1999).
                                                                                                                                   Chlamydia pneumoniae (Cl
Bacteria; Chlamydiales;
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EMBL; AE002164;
EMBL; AP002547;
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Shirai M., Hirakav
                                                                                         SEQUENCE FROM N.A.
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001 enel. 40, Last annotation
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722 1
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; AAF37901.1; -.
; BAA98948.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA;
                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                   OR CP0298
                                                                                                                                                                                                                                                                                                                                                      256
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722
644
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                                                                                                                                                     (Chlamydophila
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85.7%;
                                                                                                                                  ntamydophila pneumoniae).
Chlamydiaceae; Chlamydop
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Pred. No.
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GREA.
COILED COIL (POTENTIAL).
; E280EDB124D5E8CF CRC64;
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precursor (Polymorphic membrane
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56;
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               trachomatis.";
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UPPS_MYCLE
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Best Local S
Matches 5
                                                              UPPS_MYCLE STANDARD: PRT: 296 AA.
P38119;
01-OCT-1994 (Rel. 30, Created)
01-OCT-1994 (Rel. 30, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Undecaprenyl pyrophosphate synthetase (EC 2.5.1.31) (UPP synthetase)
(D1-trans-poly-cis-decaprenylcistransferase) (Undecaprenyl diphosphate)
upps OR ML0634 OR B1937_F2_65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-AR39;

MEDLING-20150255; PubMed-10684935;

Read T.D., Brunham R.C., Shen C., Gill S.R., Heidelberg J.F.,

White O., Hickey E.K., Peterson J., Utterback T., Berry K., Bass

Linher K., Weidman J., Khouri H., Craven B., Bowman C., Dodson R.

Gwinn M., Nelson W., DeBoy R., Kolonay J., McClarty G., Salzberg

Eisen J., Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shirai M., Hirakawa H., Kimoto M., Tabuchi M., Kishi F., Shiba T., Ishii K., Hattori M., Kuhara S., Nakazawa T.; "Comparison of whole genome sequences of Chlamydia pneumo from Japan and CWL029 from USA."; Nucleic Acids Res. 28:2311-2314(2000).
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SEQUENCE
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Pfam; PF02415; DUF145; 1.
Outer membrane; Signal; M
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           Mycobacterium leprae.

Bacteria; Actinobacteria; Actinobacteria (class); Actinobacteridae; Actinomycetales; Corynebacterineae; Mycobacteriaceae; Mycobacterium NCBI_TaxID-1769;
                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PHCI-2DPAGE; Q9Z895; TIGR; CP0298; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AE001629; AAD18596.1;
EMBL; AE002191; AAF38155.1;
EMBL; AP002546; BAA98661.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Genome sequences of Chlamydia trachomatis pneumoniae AR39.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR003368; Chlamydia_PMPInterPro; IPR003357; OMP.
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5; Conserv
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25
379
978 AA;
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4 POTENTIAL.

978 PROBABLE OUTER MEMBRANE PROTEIN

379 N -> D (IN REF. 1).
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                                                                                                                                                                                                                                                                                                                                                                                                   103654 MW;
                                                                                                                                                                                                                                                                                                                                                     77.5%;
71.4%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL.
PROBABLE OUTER MEMBRANE PROTEIN PMP14.
N -> D (IN REF. 1).
W; 6EEE142999D3019 CRC64;
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RESULT
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DT 1
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OC 0
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Matches 4
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Cole S.T., Eiglmeier K., Parkhill J., James K.D., Thomson N.R., Wheeler P.R., Honore N., Garnier T., Churcher C., Harris D., Mungall K., Basham D., Brown D., Chillingworth T., Connor R., Davies R.M., Devlin K., Duthoy S., Feltwell T., Fraser A., Hamiln N., Holroyd S., Hornsby T., Jagels K., Lacroix C., Maclean J., Moule S., Murphy L., Oliver K., Quail M.A., Rajandream M.A., Rutherford K.M., Rutter S., Seeger K., Simon S., Simmonds M., Skelton J., Squares R., Squares S., Stevens K., Taylor K., Whitehead S., Woodward J.R., Macsetter B., Stevens K., Taylor K., Whitehead S., Woodward J.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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MEDLINE-86067181; Pubm
Tomaschewski J., Gram
"T4-induced alpha- and
                                                                                                                                                                                                                                                              P04547; Q38417;
13-AUG-1987 (Rel. 05, Created)
13-AUG-1987 (Rel. 05, Last sequence update)
13-DNA beta-glucosyltransferase (EC 2.4.1.27) (BGT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; U00016; AAA17169.1; -. EMBL; AL583919; CAC30142.1; Leproma; ML0634; -.
                                                                                                                               T4-like viruses.
NCBI_TaxID=10665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS01066; UPP_SYNTHETASE; 1. Transferase; Cell division; Cell wall;
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                                                                                                                                                                                      Viruses; dsDNA viruses,
                                                                                                                                                                                                          Bacteriophage T4
                                                                                                                                                                                                                                              OR BETA-GT
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                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        263
                           PubMed=2999696;
Gram H., Crabb J.W.,
  ram H., Crabb J.W., Rueger W.;
and beta-glucosyltransferase:
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                                                                                                                                                                                         stage; Caudovirales; Myoviridae;
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     of the genes
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                                                                                                                                                                                                                                                                                                                                                                                                                                    glucosyltransferase in the presence and uridine diphosphoglucose.";
EMBO J. 13:3413-3422(1994).
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                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-99428644; PubMed-10497034;
Morera S., Imberty A., Aschke-Sonnenborn U., Ruger W.,
"T4 phage beta-glucosyltransferase: substrate binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-87231080; pubMed=3295783;
Lamm N., Tomaschewski J., Rueger W.;
"Nucleotide sequence of the deoxycytidylate
bacteriophage T4 (942) and the homology of i
thymidylate synthase of E. coli.";
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                                                                                                                                                                                                                                                                                                                                                          catalytic mechanism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 239-351 FROM N.A. MEDLINE=92335355; PubMed=1631169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kutter E., Arisaka F., Kunisawa T., Tsu
Mesyanzhinov V., Ruger W., Stidham T.,
"Bacteriophage T4 genome analysis.";
Submitted (JUL-2000) to the EMBL/GenBar
                                                                                                                                                                                                                                                                                                                                                                                                            K-RAY CRYSTALLOGRAPHY (2.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vrelink A., Rueger W., Driessen H.P.C., Tristal structure of the DNA modifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-94341252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            X-RAY CRYSTALLOGRAPHY (2.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    phage."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             proteins similar to those present in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sharma M., Ellis R.L., Hinton D.M.;
"Identification of a family of bacteriophage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 1-10 FROM
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                                                                                                                             send an email to license@isb-sib.ch).
                                                                                                                                                                             s SWISS-PROT entry is copyright. It is produced ween the Swiss Institute of Bioinformatics and European Bioinformatics Institute. There are
                                                                                                                                                                                                                                        CATALYTIC ACTIVITY: Transfers a beta-D-glucosyl residue glucose to an hydroxymethylcytosine residue in DNA. PATHWAY: INVOLVED IN THE DNA MODIFICATION PROCESS TO PROTHE PHAGE GENOME AGAINST ITS OWN NUCLEASES AND THE HOST RESTRICTION ENDONUCLEASE SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacteriol.
                                                                                                                                                                                                                                                                                                                   MOI. Biol. 292:717-730(1999).
FUNCTION: CATALYZES THE TRAN
DIPHOSPHOGLUCOSE (UDP-GLC) T
                                                                                                                                                                                                                                SUBUNIT: MONOMER.
                                                ; AF158101; AAD42545.1
; M22767; AAA88469.1;
; M69268; AAA32544.1;
; Y00148; CAA68343.1;
                                                                                                                                                                                                                                                                                                          DOUBLE-STRANDED DNA.
                         A00576; XUBPB4
1BGT; 30-SEP-9
                                                                                                    X03139; CAA26908.1;
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30-SEP-94.
30-SEP-94.
09-DEC-95.
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                                                                                       AAD42545.1;
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I., Thomas E
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15-JUN-2002 (Rel. 41,
15-JUN-2002 (Rel. 41,
15-JUN-2002 (Rel. 41,
Proteinase activated
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PDB; 1QKJ; 28-JUL-99.
PDB; 1C3J; 09-AUG-99.
Transferase; Glycosylt
CONFLICT 85
                                                                "Protease-activated receptors 1 and platelets by thrombin.";
J. Clin. Invest. 103:879-887(1999).
                                                                                                                                                                                          SEQUENCE
Rieder M
                                                                                                                                                                                                                                       "Cloning 4.";
                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-98389762; PubMed-9722561;
Kahn M.L., Hammes S.R., Botka C., Coughlin S.R.;
Kahn d.C., Coughlin S.R.;
"Gene and locus structure and chromosomal localization
protease-activated receptor gene family.";
D. Biol. Chem. 273:23290-23296(1998).
                                                                                                              Kahn M.L., Nakanishi-Matsui M., Coughlin S.R.;
                                                                                                                                                                                                                                                                  Xu W. F., Andersen H.,
                                                                                                                                                                                                                                                                                                                                   Kahn M.L., Zheng Y.-W., Huang W., Farese R.V. Jr., Tam C., Coughlin "A dual thrombin receptor system i
                                                                                                                                                                     Submitted
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Mammalia; Eutheria;
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proteins the version.

role in platelets activation.

SUBCELLULAR LOCATION: Integral membrane protein.

TISSUE SPECIFICITY: Widely expressed, with highest levels in

TISSUE SPECIFICITY: Widely expressed, with highest levels in

thoroid, testis and small intestine. Not expressed
                                                      FUNCTION: Receptor for activated thrombin proteins that stimulate phosphoinositide |
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41, Last sequence update,
41, Last sequence update,
41, Last annotation update)
ated receptor 4 precursor (PAR-4) (Thrombin receptor-
tion factor II receptor-like 3).
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Catarrhini; Hominidae
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n S.R.;
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RESULT 15
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CONFLICT
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PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Transmembrane; Glycoprotein; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
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PROTEINASE ACTIVATED RECEPTOR 4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            into isolated chloroplasts.",
Plant Mol. Biol. 11:191-202(1988).
Plant Mol. Biol. 11:191-202(1988).
Plant Mol. Biol. 11:191-202 (1988).
PLANT MOLICATED CHLOROPLAST ENZYME, ENCODED BY A
NUCLEAR GENE AND EXPRESSED PRIMARILY IN LEAVES, IS RESPONSIBLE I
THE REASSIMILATION OF THE AMMONIA GENERATED BY PHOTORESPIRATION
THE REASSIMILATION OF THE AMMONIA GENERATED BY PHOTORESPIRATION
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Glutamine synthetase leaf isozyme, chloroplast precursor (EC 6.3.1.2)
(Isozyme delta) (Glutamice--ammonia ligase).
Phaseolus vulgaris (Kidney bean) (French bean).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Epermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
eurosids I; Fabales; Fabaceae; Papilionoldeae; Phaseoleae; Phaseolus.
NCBI_TaxID=3885;
                                                                                                                                                         Nitrogen fixation;
Transit peptide.
TRANSIT 1
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Lightfoot D.A., Green N.K., Cullimore J.V.;
"The chloroplast-located glutamine synthetase of Phaseolus vulgaris
L.: nucleotide sequence, expression in different organs and uptake
                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                    entities requires a license agreement (See http://www.isb-sib.ch/announce/
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O9ree9 bradyrhizob
Q94882 drosophila
O9luyl arabidopsis
O9kfbl bacillus ha
o43022 schizosacch
O52995 escherichia
O92rf9 rhizobium m
O98b00 rhizobium m
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O98b00 sapergillus
O9uv62 aspergillus
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Q1-JUN-2003 (TrEMBLrel. 21, Last annotation update)
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ALIGNMENTS

SEQUENCE FROM N.A	[2]	Nature 409:685-690(2001).	"Functional annotation of	Hayashizaki Y.;	Wynshaw-Boris A.	Suzuki H., Toyo-	Sasaki H., Sato	Nordone P., Ring	Lyons P., Marchi	Gustincich S., H	Brownstein M.J.,	Blake J., Boffel	Sakai K., Okido	Schriml L.M., St	Kuehl P., Lewis	Fleischmann W.,	Kadota K., Matsu	Saito T., Okazak	Aizawa K., Izawa	Arakawa T., Hara	Kawai J., Shinag	MEDLINE-21085660	STRAIN=C57BL/6J; TISSUE=SKIN
		90(2001).	ation of a full-length mouse cDNA collection.";		Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,	Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,	Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch KF.,	Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,	Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,	Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,	Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,	Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,	Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,	Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,	Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,	Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,	Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,	Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,	Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,	Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,	Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,	MEDLINE=21085660;	TISSUE=SKIN;

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01-MAY-2000
4 01-MAY-2000
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01-DEC-2001
01-MAR-2002
             01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation updat
Hypothetical 33,2 kba protein
Bradyrhizobium japonicum.
Bacteria; Proteobacteria; alpha subdivision; Rhiz
                                                                                                                                                                                                                                                                                                                                                                                               Serpin.
SEQUENCE
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Nangaku M., Miyata T., Suzuki D., Umezono T., Hashimc Yagi M., Nagano N., Inagi R., Kurokawa K.;
"Cloning of rodent megsin revealed its up-regulation mesangioproliferative nephritis.";
Kidney Int. 60:641-652(2001).
EMBL; AK014524; BAB29410.1; -.
EMBL; AK105288; AAL16768.1; -.
EMBL; AF105328; AAL16768.1; -.
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SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN; UNKNOWN_1.
SPOUENCE 380 AA; 43050 MW; C9240
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Mammalia; Eutheria;
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Rodentia;
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85.7%;
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Pred. No. 21;
1; Mismatches
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Pred. No.
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SMART;

SM00015; IQ; 6. SM00242; MYSc;

PS50096; IQ; 1.

Myosin

PROSITE;

Pfam; PF00612; IQ: 6.
Pfam; PF00063; myosin_head; 1.
PRINTS; PR00193; MYOSINHEAVY.
ProDom; PD000355; myosin_head;
ProDom; PD003376; DIL; 1.

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RESULT 4
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01-JAN-1998 (TREMBLEEL 05, L.
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DILUTE CLASS UNCONVENTIONAL my
DIDUM OR CG2146.
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             Thesis (1997), University of Edinbuenel, Y08160; CAA69352.1; -. HSSP; P1587; IBR2.
FlyBase; FBgn0015933; didum.
InterPro; IPR002710; DIL.
InterPro; IPR001609; myosin_head.
     Pfam;
                                                                                                                                                                                                                                                            Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
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Minder A.C., de Rudder K.E.E., Narberhaus F., Fischer H.M.,
Hennecke H., Geiger O.;
"Phosphatidylcholine levels in Bradyrhizobium japonicum membranes critical for an efficient symbiosis with the soybean host plant.";
Mol. Microbiol. 39:1186-1198(2001).
EMBL; Y09633; CAB60667.1; -.
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Q1-FEB-1997 (Tr
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                                                                                                                                                    MacIver
                                                                                                                                                                                                        NCBI_TaxID=7227;
                                                                                                                                                                                                                               Ephydroidea;
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PF01843; DIL;
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71.4%;
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myosin.
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45;
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InterPro; IPR001993; Mitoch_carrier.
InterPro; IPR001901441; UPP_synth.
Pfam; PF01255; UPP_synthetase; 1.
ProDom; PD003461; UPP_synth; 1.
TICRPAMS; TIGR00055; UPPS; 1.
PROSITE; PS01066; UPP_SYNTHETASE; UNKN
PROSITE; PS01066; UPP_SYNTHETASE; UNKN
TRANSFERSE
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O9KFB1;
O1-OCT-2000 (TrEMBLrel. 1
O1-OCT-2000 (TrEMBLrel. 1
O1-JUN-2001 (TrEMBLrel. 1
Chromate transporter.
CHRO OR BH0574.
Bacillus halodurans.
Bacillaceae; Bacillus.
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01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Cls-Prenyltransferase homolog-like, undecaprenyl phosphate
SEQUENCE FROM N.A.
STRAIN-C-125 / JCM 9153;
MEDLINE-20512582; PubMed-11058132;
Takami H., Nakasone K., Takaki Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-COLUMBIA;
MEDLINE-20181125;
Sato S., Nakamura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosideurosids II; Brassicales; Brassicaceae; Arabidopsis.
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features of the regio
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Y., Kaneko T., Katoh T., Asamizu E., Kotani H.
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69;
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O1-JUN-1998 (TrEMBLrel. C
O1-JUN-1998 (TrEMBLrel. C
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PCOLD-157 mbdD protein.
PCOLD-157 MBDD.
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RA RT RT RT DR COR
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Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
Schizosaccharomycetales; Schizosaccharomycetaceae;
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01-JUN-1998 (TrEMBLrel. 06, La
01-JUN-2001 (TrEMBLrel. 17, La
Hypothetical 99.2 kDa protein
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EMBL; APO01509; BAB04293.1; -
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InterPro; IPR003370; Chromate_transp.
Pfam; PF02417; Chromate_transp; 2.
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Horikoshi K.;
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52 POTENTIAL.

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196 POTENTIAL.

103 POTENTIAL.

104 POTENTIAL.

105 POTENTIAL.

106 POTENTIAL.
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Pred.
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PRT;
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RESULT 10
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01-DEC-2001 (TrEMBLrel. 19, L
01-MAR-2002 (TrEMBLrel. 20, L
Hypothetical peroxiredoxin pr
R00915 OR SMC00072.
  Q98B00;
Q98B00;
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01-OCT-2001
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Q92RF9;
Q1-DEC-2001
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Proc. Natl. Acad. Sci. U.S.A. 98:9877-9882(2001).
EMBL; AL591785; CAC45487.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Capela D., Barloy-Hubler F., Gouzy J., Bothe G., Ampe F., Batut Boistard P., Becker A., Boutry M., Cadieu E., Dreano S., Gloux S. Godrie T., Goffeau A., Kahn D., Kiss E., Lelaure V., Masuy D., Pohl T., Portetelle D., Puehler A., Purnelle B., Ramsperger U., Renard C., Thebault P., Vandenbol M., Weidner S., Galibert F.; "Analysis of the chromosome sequence of the legume symbiont sinorhizobium meliloti strain 1011.";
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"Structure and function of plasmid pcolD157 of enterohemorrhagic Escherichia coli 0157 and its distribution among strains from patwith diarrhea and hemolytic-uremic syndrome.";
J. Clin. Microbiol. 36:24-29(1998).
                                                                                                                                                                                                                                                                                                                                                                                                              Hypothetical SEQUENCE 16
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MEDLINE-21396507;
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Bacteria: Proteobacteria: alpha subdivision;
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MEDLINE=98092211; PubMed=9431914;
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Plasmid pColD-157.
Bacteria; Proteoba
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16997 MW; 9FAA1CBFD1D31C01 CRC64;
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"Complete genome structure"
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01-MAY-2000 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
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DNA Res. 7:331-338(2000).
EMBL; AP003007; BAB52172.1;
InterPro; IPR0014839; Aminotransf1/2.
InterPro; IPR001917; MHTRANSFE.
InterPro; IPR001917; MHTRANSFE.
Pfam; PF00155; aminotran_1_2; 1.
PIGRFAMs; TIGR01141; hisG; 1.
PROSITE; PS00599; AA_TRANSFER_CLASS_2; UNKNOWN_1.
                                                                                                                                                                                                  EMBL;
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Appl. Environ. Microbiol.
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Asperg
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MEDLINE=21082930; PubMed=11214968;
                                                          Methyltransferase;
INIT_MET 0
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PROSITE; PS00879; ODR_DC_2_2; UNKNOWN_1.
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CBI_TaxID=381;
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STRAIN=CRA01-2B;
MEDLINE=20267858; pubMed=10806361;
YU J., Woloshuk C.P., Bhatnagar D., Cleveland 'Yu J., Woloshuk C.P., Bhatnagar D., Cleveland 'Cloning and characterization of avfa and omtB aflatoxin biosynthesis in three Aspergillus sp Gene 248:157-167(2000).

EMBL; AF159789; AAF26223.1; -...
InterPro; IPR000183; Decarbxy1se2.
InterPro; IPR001071; O_Metransf.
InterPro; IPR001077; O_Metransf.
InterPro; IPR001071; O_Metransf.
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01-MAY-2000 (TrEMBLrel. 1
01-MAY-2000 (TrEMBLrel. 1
01-MAR-2002 (TrEMBLrel. 2
0-methyltransferase B.
                                                                                                                                                                                                                                                                                                                                                                                       09P900;
01-0CT-2000 (TrEMBLrel.
01-0CT-2000 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
0-methyltransferase B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interpro; IPR000183; Decarbxy1se2.
Interpro; IPR001601; Methyltransf.
Interpro; IPR001077; O_Metransf2.
Pfam; PF00891; Methyltransf2.
PROSITTE: none
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Asperg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Cloning and characterization of avfA and or aflatoxin biosynthesis in three Aspergillus Gene 248:157-167(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aspergillus parasiticus.
Eukaryota; Fungi; Ascomycota;
Eurotiales; Trichocomaceae; mi
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PROSITE; PS00879; ODR_DC_2_2; UNKNOWN_1.
                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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ltosporic Trichocomaceae; Asperg
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Q9GRW8; PRELIMINARY;
Q1-MAR-2001 (TrEMBLrel. 16,
01-MAR-2001 (TrEMBLrel. 17,
01-JUN-2001 (TrEMBLrel. 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       O9FFVO;
O1-MAR-2001 (TrEMBLrel. 16, Created)
O1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
O1-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Similarity to GTPase activating protein.
Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core e
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
SEQUENCE FROM N.A.
Campesan S., Chalmers D., Sandrelli F., Megighian A., Peixoto A.A.
Costa R., Kyriacou C.P.;
"Comparative analysis of the nonA region in Drosophila identifies
"Comparative analysis of the sy constrain nonA promoter evolution
Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ298996; CAC10057.1; -.
                                                                                                                                                                   Drosophila virilis (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda;
Pterygota; Neoptera; Endopterygota; Diptera; Brachyo
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID-7244;
                                                                                                                                                                                                                                                                                  GPI1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPRO00195; RabGAP_TBC.
Pfam; PF00566; TBC; 1.
SMART; SM00164; TBC; 1.
                                                                                                                                                                                                                                                                                                  GPI1 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Miyajima N., Tabata S.; "Structural analysis of Arabidopsis features of the 1.6 Mb regions cover
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-97471969; Pubmed-9330910;
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005232; BAB08757.1;
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N., Tabata
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DR FLYBRAGE: FBR0002(73); DYLYOPII.

SQ SEQUENCE 473 AM, 5005 MM; A6232375C5A834GA CRC64;

DUSTY MAICH BO.01, SCOTT 32; DB 5; Length 473;

BRET LOCAL Similarity 11.48; Pred. Mo. 1.8-042;

OY 1 MCAPTK 7
Db 20 HIIII
Db 20 MOSITIK 208

Search completed; July 11, 2003, 11:58:51

JOD time: 6.05613 secs
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Result
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score greater than or equal to the score of the result being pa
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                                                                                                                                                                                                                                                                              Length DB
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            IJ
       AAR48379
AAX08254
AAB24125
AAB83075
AAR57109
AAX08256
AAB24151
AAB83077
AAX08255
AAB24150
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ALIGNMENTS

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WPI; 1994-058782/08
N-PSDB; AAQ56670.
                                                            Ishida N, Iv
Tsujimoto M,
                                                                                                                                                                                      17-JUL-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                              Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                        (SUNR ) SUNTORY LTD. (TSUJ/) TSUJIMOTO M.
                                                                                                                                                                                                                                                   19-JUL-1993;
                                                                                                                                                                                                                                                                                            23-FEB-1994
                                                                                                                                                                                                                                                                                                                                  EP583884-A.
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                                                            Iwasa F, Kuril
M, Tsuruoka N,
                                                                                                                                                                                      92JP-0212305
93JP-0067339
                                                                                                                                                                                                                                                   93EP-0305654
                                                              Kurihara T, Miura K, Nakazato H;
oka N, Yamaguchi N, Yamaichi K;
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RESULT 2
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Best Local :
                                                               This invention describes the isolation of novel megsin nucleic acid any proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial cells, such as IgA nephropathy.
                                                                                                                                                                                                                                  (KURO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    carcinoma A431 cells in protein free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoietin making it useful for treatment of diseases involving a decrease in platelet number
                                                                                                                                                                                         WPI;
                                                                                                                                                                                                                                                                                                                                 WO9915652-A1
                                             Sequence
                                                                                                                                  Claim 1; Page 62-64; 100pp; Japanese.
                                                                                                                                                      Megsin protein expressed specifically
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human MDF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New megakaryocyte differentiation epidermoid carcinoma cells, used t
             Local
                                                                                                                                                                             1999-276983/23.
DB; AAX56712.
                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7;
                                                                                                                                                                                                                                                                                                                                                                            rat; murine
   . Similarity
19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
19; Conserv
                                                                                                                                                                                                                                  KUROKAWA K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERVDFTNHLEDTRRNINK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERVDFTNHLEDTRRNINK 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   can
                                              380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   380 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; ilarity 100.0%; Conservative (
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           platelets
                                                                                                                                                                                                                                                                                                                                                                                                          protein
                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      be isolated from a culture of human epidermoid cells in protein-free medium. The MDF stimula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-32; 47pp;
                                             ₹,
                                                                                                                                                                                                                                                                  97JP-0275302
                                                                                                                                                                                                                                                                                       98WO-JP04269.
            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                       treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
 Score 100; DB 20;
Pred. No. 7.6e-08;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 100; DB 15;
Pred. No. 7.6e-08;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 factor -
                                                                                                                                                                                                                                                                                                                                                                                     diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       treat conditions
                                                                                                                                                      in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                isolated from human
                                                                                                                                                                                                                                                                                                                                                                                     disease;
                    Length
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      involving
                                                                                                                                                                                                                                                                                                                                                                                     IgA nephropathy;
                       380;
  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      þ
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                           and
  0;
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RESULT 4
AAB83075
ID AAB8
XX
AC AAB8
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RESULT 3
AAB24142
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                                                            Best
                                               Matches
                                                                      Query Match
                                                                                                                 The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably urine or blood). The process is reproducible and gives accurate results. The present sequence represents the human megsin protein, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                         Evaluating renal function comprises assaying megsin protein biological sample \ \boldsymbol{\cdot}
                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                               N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                  Miyata T;
                                                                                                                                                                                                                                           The present invention describes a method for evaluating
                                                                                                                                                                                                                                                                  Example 2; Page 66-69;
                                                                                                                                                                                                                                                                                                                                           WPI; 2000-611642/58
                                                                                                                                                                                                                                                                                                                                                                                                                                        19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200057189-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human megsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB24142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB24142 standard;
                                                                                                                                                                                                                                                                                                                                                                                         (MIYA/)
                                                                                                                                                                                                                                                                                                                                                                                                     (FUSO
                                                                                                                                                                                                                                                                                                                                                                                                                 (KURO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-MAR-2000; 2000WO-JP01646
                                                            Local
 126
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                       ш
                                               l Similarity 100
19; Conservative
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                                                                                                                                                                                                                                                                                                                             AAA99294
                                                                                                                                                                                                                                                                                                                                                                                         MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                 KUROKAWA K
                                                                                                                                                                                                                                                                                                                                                                                                     FUSO PHARM IND LTD
            VERVDFTNHLEDTRRNINK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERVDFTNHLEDTRRNINK
 VERVDETNHLEDTRRNINK
                                                                                               380 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                        99JP-0075305.
99JP-0306623.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein;
                                                           100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence
                                                                                                                                                                                                                                                                 93pp;
                                                            .0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                380
                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          144
 144
                       19
                                                                                                                                                                                                                                                                  Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                            Score 100;
Pred. No. 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ
                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NO:2.
                                              DB 21;
7.6e-08;
es 0;
                                                 Indels
                                                                       Length
                                                                                                                                                                                                                                           renal function.
                                                                       380;
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                                               Gaps
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AAB83075

standard;

Protein; 380

Fri

Jul 11

15:10:43 2003

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                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is human megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is useff for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                         Human megakaryocyte differentiation factor; MDF; thrombopoietin; haematopoietic stimulating factor; thrombocytopaenia; platelet; bone marrow transplantation; cancer chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; megsin; mesangial cell proliferative nephritis; nephrotropic; transgenic mouse; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                           Human megakaryocyte
                                                                                                                                                                  16-AUG-1994
                                                                                                                                                                                                             AAR57109 standard; peptide; 19
                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 4; Page 44-46; 62pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse model for mesangial cell proliferative nephritis for development and screening of new treatments \cdot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-300136/31.
N-PSDB; AAF82438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-OCT-2000; 2000WO-JP06988.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200124628-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
             Misc-difference
                                                                                                                                                                                         AAR57109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-JUL-2001
                                   Misc-difference
                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                              method
                                                                                                                                                                                                                                                                        126 VERVDETNHLEDTRRNINK 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           megsin protein
                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                      VERVDFTNHLEDTRRNINK 19
                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                      ₩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99JP-0285736.
             /note= "not determined"
14
                                   Location/Qualifiers
 /note= "not determined"
                                                                                                                                         differentiation
                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                   Score 100; DB 22; Pred. No. 7.6e-08;
                                                                                                                                                                                                                ₹
                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                         factor peptide
                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                              380;
                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                            useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of.
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RESULT 6
AAY09256
ID 0AAY0
XX AAY0
AC AAY0
DT 14-J
XX Megs
XX Megs
KW huma
XX Mus
XX Mus
XX Mus
XX Mus
XX Wog:
FT Prot
FT Prot
FT Prot
XX Wog:
XX Wog:
XX Wog:
XX Wog:
XX Wog:
XX Y Wog:
XX Y XX Y YET
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Best Local :
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                                                                                            Key
Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                        Human MDF (see AAR48379) can be isolated from a culture of human epidermoid carcinoma A431 cells in protein-free medium. The MDF stimulates differentiation of megakaryocytes from myeloid cells in the presence of IL-3. The MDF acts in vivo as a thrombopoletin making it useful for treatment of diseases involving a decrease in platelet number (esp. thrombocytopaenia) such as occurs in bone marrow transplantation and in chemotherapy. MDF has mol.wt. 55-57kD by SDS-PAGE, exhibits an isoelectric point of 6.0-7.0 and contains an amino acid sequence comprising at least one of the sequences AAR57107-R57115.
                                                                                                                                                                                                                 14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 18; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New megakaryocyte differentiation factor epidermoid carcinoma cells, used to treat decrease in platelets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JUL-1992;
04-MAR-1993;
                                   01-APR-1999
                                                                                                                               Mus musculus
                                                                                                                                                                                         Mouse megsin
                                                                                                                                                                                                                                        AAY08256;
                                                                                                                                                                                                                                                               AAY08256 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tsujimoto M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ishida N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SUNR ) SUNTORY LTD. (TSUJ/) TSUJIMOTO M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                          WO9915652-A1
                                                                                                                                                       numan;
                                                                                                                                                                  Megsin; mesangial cell; treatment; diagnosis; disease; IgA nephropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1994-058782/08.
                                                                                                                                                       rat; murine.
                                                                                                                                                                                                                                                                                                                                     1 VERVDFTNHLEDTRRNINK 19
                                                                                                                                                                                                                                                                                                                                                                        16;
                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                          VEXVDFTNHLEDTXXNINK 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Iwasa F,
                                                                                                                                                                                                                                                                                                                                                                                                                       19 AA;
                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                        protein
                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tsuruoka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92JP-0212305
93JP-0067339
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                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note=
                                                                                                                                                                                                                                                               Protein;
                                                                                                                                                                                                                                                                                                                                                                                   82.0%;
84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kurihara T, Miura
ka N, Yamaguchi N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "not determined"
                                                                                "partial sequence"
                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                               368
                                                                                                                                                                                                                                                                                                                                                                                    Pred.
                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                               ₹
                                                                                                                                                                                                                                                                                                                                                                                    82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             treat conditions involving
                                                                                                                                                                                                                                                                                                                                                                                   1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         K, Nakazato
Yamaichi K;
                                                                                                                                                                                                                                                                                                                                                                                              DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        isolated from human
                                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                                        Indels
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22-SEP-1998;

98WO-JP04269

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RESULT 7
AAB24151
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                    Disclosure;
                                                      Evaluating renal function comprises assaying megsin protein biological sample \,\,
                                                                                     N-PSDB;
                                                                                               WPI;
                                                                                                                                                                                                                                                                                Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes the isolation of novel megsin nucleic acid an proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial
                                                                                                                  Miyata T;
                                                                                                                                    (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM
(MIYA/) MIYATA T.
                                                                                                                                                                           19-MAR-1999;
28-OCT-1999;
                                                                                                                                                                                                       17-MAR-2000;
                                                                                                                                                                                                                          28-SEP-2000
                                                                                                                                                                                                                                              WO200057189-A1
                                                                                                                                                                                                                                                                 Mus musculus.
                                                                                                                                                                                                                                                                                                                         Mouse megsin
                                                                                                                                                                                                                                                                                                                                             30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                AAB24151;
                                                                                                                                                                                                                                                                                                                                                                                  AAB24151 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 76-79; 100pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Megsin protein expressed specifically in mesangial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                    2000-611642/58
DB; AAC55239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1999-276983/23
)B; AAX56714.
                                                                                                                                                                                                                                                                                                                                                                                                                                  114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                such as IgA nephropathy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                  VERVDFTNDVQDTRFKINK 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              368 AA;
                                    Page 89-91; 93pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                       2000WO-JP01646
                                                                                                                                                                                                                                                                                                                         protein sequence
                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                           99JP-0075305.
99JP-0306623.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71.0%;
73.7%;
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                                                                                                                                                                                                                                                                                                                                                                                  368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 71; DB
Pred. No. 0.00
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Japanese.
                                                                                                                                                                                                                                                                                                                         SEQ ID NO:21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 20;
0.0034;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          368;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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The present invention describes a method for evaluating renal function The method comprises assaying megsin protein in biological sample. Also described are: (1) use of a antimegsin protein antibody for diagnosing

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1 VERVDFTNHLEDTRRNINK 19

Query Match Best Local Matches

rocar

l Similarity 14; Conser

Conservative

71.0%;

Score 71; DB 22; Pred. No. 0.0034; 2; Mismatches

Length 368

Indels

0

Gaps

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RESULT 8
AAB83077
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Best Local S
Matches 14
                                        sequence may be introduced into a mouse to produce an animal model of mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an immune complex and an increase in mesangial cells. The animal model is usef for analysing the pathology of chronic glomerular diseases and for screening compositions for prevention and treatment of the diseases. Highly uniform models can be made easily and in large numbers using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              renal function; and (2) a kit for detecting megsin protein comprising: (a) antimegsin protein antibody attached to solid magnetic particles; (b) direct or indirect fixing for the antibody to the particles; and (c) a magnet. The process is useful for evaluating renal function and diagnosing renal disorders by assaying megsin protein in biological samples (preferably unine or blood). The process is reproducible and gives accurate results. The present sequence represents the mouse megsin protein, which is given in the exemplification of the present invention.
 Sequence
                                                                                                                                     The present sequence is murine megsin protein. The human megsin coding sequence may be introduced into a mouse to produce an animal model of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murine megsin
                                                                                                                                                                                 Disclosure;
                                                                                                                                                                                                            Mouse model for mesangial cell proliferative and screening of new treatments
                                                                                                                                                                                                                                                           N-PSDB;
                                                                                                                                                                                                                                                                         WPI; 2001-300136/31
                                                                                                                                                                                                                                                                                                       Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                 06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                             06-OCT-2000; 2000WO-JP06988
                                                                                                                                                                                                                                                                                                                                                                                                                                         12-APR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transgenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB83077;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB83077 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                   (KURO/) KUROKAWA K.
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse; megsin;
                               method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 114 VERVDFTNDVQDTRFKINK 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14; Conserv
                                                                                                                                                                                                                                                           AAF82440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERVDETNHLEDTRRNINK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mouse;
368 AA;
                                                                                                                                                                                 Page 52-53; 62pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mesangial cell proliferative nephritis; nephrotropic;
se; glomerular disease; animal model; drug screening.
                                                                                                                                                                                                                                                                                                                                                                                 99JP-0285736
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                                                                                                                                                                                                                            nephritis for development
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                                                                                                       an immune
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                                                                                           useful
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RESULT 9
AAYO8255
ID AAYO
XX AAYO
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XX AAYO
DT 14-J
DEE Rat
XX Megs
KW huma
XX W MO99
XX Ratt
XX W O1-P
XX (KUI
PA (KUI
PA (MI)
XX WI
PA (MI)
XX WPI
DR WPI
DR WPI
XX WPI
DR WPI
XX C1a
XX C1a
XX C1a
XX S6 Seq
S6 Seq
RESULT 10
AAB24150
ID AAB24
XX AB24
XX AB24
XX 30-JA
DT 30-JA
XX Megs1
KW 1GA;
KW 1GA;
KW dlagn
XX ARTLU
XX RETU
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Best Local S
Matches 13
                                      Megsin; mesangium-predominant gene; serpin regulated; nephropathy; IgA; immunoglobulin A; detection; renal function; renal disorder; diagnosis; biological sample; blood; urine.
                                                                                                                                                                                                                                                                                                                  This invention describes the isolation of novel megsin nucleic acid and proteins from human, rat and mouse tissue. This protein is expressed specifically in mesangial cells. The products of the invention are useful for the treatment and diagnosis of diseases involving mesangial
                                                                                                       30-JAN-2001
                                                                                                                            AAB24150;
                                                                                                                                                 AAB24150 standard;
                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                          cells, such as IgA
                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 69-72; 100pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-276983/23
N-PSDB; AAX56712.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Miyata T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KURO/) KUROKAWA K. (MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9915652-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Megsin; mesangial cell; human; rat; murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rat megsin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY08255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY08255
                                                                                  Rat megsin protein sequence SEQ
                                                                                                                                                                                                                                                                                                                                                                                           Megsin protein expressed specifically in mesangial cells
                   Rattus norvegicus
                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                                                               VERVDFTNHLEDTRRNINK 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; Protein;
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                                                                                                                                                                                                    VERVDFTNDIQETRFKINK 144
                                                                                                                                                                                                                                                                                     380
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                                                                                                      (first entry)
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Location/Qualifiers
                                                                                                                                                 Protein; 380
                                                                                                                                                                                                                                                                                                         nephropathy.
                                                                                                                                                                                                                                                     68.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treatment; diagnosis; disease; IgA nephropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       380
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                                                                                                                                                                                                                                                     Score 68;
Pred. No.
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                                                                                  ID NO:19
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0.011;
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RESULT 11
AAG64286
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           biological
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N-PSDB; AAC55238.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Misc-difference
26-DEC-2000; 2000WO-JP09251
                                                     WO200148019-A1
                                                                               Rattus norvegicus
                                                                                                          Rat; megsin;
                                                                                                                                   Rat megsin protein
                                                                                                                                                               21-SEP-2001
                                                                                                                                                                                         AAG64286;
                                                                                                                                                                                                                  AAG64286 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 81-84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Evaluating renal function comprises assaying megsin protein biological sample -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KURO/) KUROKAWA K.
(FUSO ) FUSO PHARM
(MIYA/) MIYATA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-MAR-1999;
28-OCT-1999;
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                                                                                                                                                                                                                                                                                    126 VERVDFTNDIQETRFKINK 144
                                                                                                                                                                                                                                                                                                                                         13;
                                                                                                                                                                                                                                                                                                          1 VERVDETNHLEDTRRNINK 19
                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                           380 AA;
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                                                                                                          renal
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99JP-0306623
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                                                                                                          mesangial cell; mesangium proliferative nephritis.
                                                                                                                                                                                                                  Protein;
                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                    83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "unspecified"
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0.011;
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28-DEC-1999;

99JP-0373677

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RESULT 12
AAAB83076
ID AAAB83
XX AAAB83
XX AAAB83
XX AAAB83
XX AAAB83
XX AAAB83
XX Rat;
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Best Local :
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                                 The present sequence is rat megsin. The human megsin coding sequence may be introduced into a mouse to produce an animal mesangial cell proliferative nephritis. The symptoms include enlargement of the mesangial base region, sedimentation of an
                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB;
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           enlargement
complex and
                                                                                                                                                                                                                         Disclosure;
                                                                                                                                                                                                                                                                                    Mouse model for mesangial cell proliferative nephritis and screening of new treatments \,\cdot\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miyata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (KURO/) KUROKAWA
(MIYA/) MIYATA T.
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transgenic mo
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s type of disorder.
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DB; AAF82439.
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DB; AAH48181.
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                                                                                                                                                                                                                                            Baciu
                                                                                                                                                                                                                                                                                                                                                      20-MAR-1996;
17-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                        16-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-APR-1997
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antagonist.
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  Psoriastatin type I (AAW15241) is a 43 kDa polypeptide that
                                             Disclosure;
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                                                                                                                                                                                                   1997-244853/22
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                                                                                                                                                                                                                                         Goetinck PF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     390
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                                           Page 44-45; 63pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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950S-0005679
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein; 390
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position of
serpins"
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                                                                                                                                                                                                                                            Hibino
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                                                                                                          modulating activity (ant)agonists,
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Use of a recombinant protein and its allelic variant as receptors for a hepatitis virus, useful for producing and screening for antiviral drugs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCCA1; squamous cell carcinoma antigen; human; hepatitis B virus; HBV; receptor; antiviral; virucide; screening; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim
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Sequence 390 AA;

So Sequence 300 AA;

South Sequence 30, 00, Score 50, DB 20; Length 390;

Best Local Similarity 55.6%; Pred. No. 8.6;

Matches 10; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

Oy 1 PROPENHADDRANN 18

Db 131 VESUPENMAPRESHKKIN 148

Search completed: July 11, 2003, 11:54:19

Job time: 11.9023 secs
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Total number of hits satisfying chosen parameters:
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2: /cgn2_6/ptodata/1,
3: /cgn2_6/ptodata/1,
4: /cgn2_6/ptodata/1,
5: /cgn2_6/ptodata/1,
6: /cgn2_6/ptodata/1,
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Sequence 5, Appli	Sequence 2, Appli	Sequence 5280, Ap	Sequence 4, Appli	4	Sequence 4, Appli	Sequence 4, Appli	Sequence 2, Appli	Sequence 4537, Ap	Sequence 2, Appli	Sequence 4915, Ap			Sequence 112, App		Sequence 110, App	Sequence 110, App	Sequence 2, Appli

ALIGNMENTS

Minimum DB Maximum DB

Database

Sequence:

Run on:

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US-08-611-977-3
                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-067339
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
                     TELEFAX: (703) 836-2021 INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: TSUJIMOTO, Masafumi
APPLICANT: TWASA, Fuyuki
APPLICANT: TSURODOXA, NO. 5972886uo
APPLICANT: NAKAZATO, Hiroshi
APPLICANT: MIURA, Kenju
APPLICANT: ISHIDA, NO. 5972886uhiro
APPLICANT: KURIHARA, Tatsuya
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAICHI, KOZO
APPLICANT: YAMAICHI, NO. 5972886omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION: FACTOR
RUMBER OF SEQUENCES: 34
                                                              REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATECHTIN Release #1.0, 1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/611,977
FILING DATE: 06-MAR-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Burns, Do
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: P.O. Box
CITY: Alexandria
STATE: Virginia
                                                                                                                                   NAME: McGowan, Malco REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: United States ZIP: 22313-1404
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                                                                                                                                                         McGowan, Malcolm K.
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                                                                                                             001560-204
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MOLECULE TYPE:

TYPE: amino acid STRANDEDNESS: sin TOPOLOGY: linear

single

CENGTH:

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   Query Match
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                                                                                                                      INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ent No.
                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 536 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                     TOPOLOGY: linear
                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                            REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS
                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: JP 4-
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
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: United States
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                                                                                                                                  (703) 836-2021
                                                                                                                                                                                                                                                                                                                                                                                                                                  PatentIn Release #1.0, Version #1.30
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   100.0%;
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Best Local :
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INFORMATION FOR SEQ
                                                                                                                                                                                     VEORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: JP 5
FILING DATE: 04-MAR-1993
AFTORNEY/AGENT INFORMATION:
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                                                                                                                               TOPOLOGY: 1 MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                        LENGTH: 380 amino acids
                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: UFILING DATE: 14-JUL-1
                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: JP 4-212305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/474,661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                                                                                                                FELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
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126 VERVDFTNHLEDTRRNINK 144
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                           1 VERVDFTNHLEDTRRNINK 19
                                                        19;
                                                                       Similarity
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                                                                                                                                                         amino acid
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                                                                                                                                                                                                                                                                                           REA, TERESA STANEK
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                                                                                                                                                                                                                     (703)
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YAMAGUCHI, NO. 5874253omi
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                                                                                                                                              linear
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                                                                                                                             protein
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                                                        100.0%; Score 100; DB 2;
100.0%; Pred. No. 5.7e-09;
tive 0; Mismatches 0;
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): Mismatches 0;
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                                                                                 Length 380;
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                                                            Sequence 3, Application Patent No. 5831030 GENERAL INFORMATION:
                                                                                                                                                                                                                                                   Matches
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Best Local 9
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INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
TYPE: amino acid
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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PRIOR APPLICATION UNMER: JP 4-212305
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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REFERENCE/DOCKET NUMBER: 001560-204
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER:
FILING DATE: 14-JUL-
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CORRESPONDENCE ADDRESS:
                   APPLICANT:
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CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                INFORMATION:
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                                                                                                Application US/08472659
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TSUJIMOTO, Masafumi
IWASA, Fuyuki
TSUROUOKA, No. 5831030uo
NAKAZATO, Hiroshi
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YAMAICHI, KOZO
YAMAGUCHI, NO. 5972886omi
ENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-472-659-3
                                                                                                                                                                                                                                                                              RESULT 6
US-08-474-661-3
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                                                                                                                                                                                                                            Patent No. 5874253
GENERAL INFORMATION:
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                                                                                                              APPLICANT:
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ATTORNEY/AGENT INFORMATION:
NAME: MCGOWAN, MAICOLM K.
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FILING DATE: 07-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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APPLICANT: YAMAGUCHI, NO. 5831030omi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                             APPLICANT:
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Similarity 84.2%;
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KURIHARA, Tatsuyu
YAMAICHI, KOZO
YAMAICHI, NO. 58742530mi
YAMAGUCHI, NO. 58742530mi
YAMAGUCHI, NEGAKARYOCYTE DIFFERENTIATION FACTOR
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ISHIDA, No. 5831030uhiro
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TSURUOKA, No. 5874253uo
NAKAZATO, Hiroshi
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ISHIDA, No. 5874253uhiro
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Pred. No. 1.6e-07;
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                                                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                           Sequence
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                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                        APPLICANT: Kato, Hirus...
APPLICANT: Sekiguchi, Kiyoshi
APPLICANT: Takeda, Katsumichi
APPLICANT: Takeda, Katsumichi
APPLICANT: TAVENTION: DNA FRAGMENT CODING FOR SQUAMOUS CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
STRANDEDNESS: single
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REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
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FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: REA, TERESA STANEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/091,02
FILING DATE: 14-UUL-1993
APPLICATION NUMBER: JP 4-212305
FILING DATE: 17-UUL-1992
PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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                                                                                                         STREET: 400 Garden City Plaza
CITY: Garden City
STATE: New York
 SOFTWARE:
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STATE: Virginia
                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/474,661
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                                                                                       11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                VEXVDFTNHLEDTXXNINK 19
                                                                                                                                                                                                                                                                                                                                                             Application US/08568147B
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George Mason Bldg.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : (703) 836-6620
(703) 836-6620
OR SEQ ID NO: 3:
                                                                                                     USA
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linear
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-JUN-1995
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84.2%;
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Pred. No. 1.66
0; Mismatches
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1.6e-07
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US-08-135-510-5
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US-08-135-510-5
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Best Local Similarity
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                                                                            INFORMATION FOR SEQ ID NO:
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TELEX: 230 901 SANS U
INFORMATION FOR SEQ ID NO:
                                                                                                                      REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 18
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/135,510
                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                 CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: CHIANG, TITLE OF INVENTION:
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ATTORNEY/AGENT INFORMATION:
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LENGTH: 390 amino acids
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                                                                               TELEFAX: 1236
                               TYPE:
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              TOPOLOGY:
                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                      NAME:
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                                            ENGTH:
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                                                                                                                                                                                  SANDERCOCK, Colin G
                               amino acid
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                                           482 amino acids
                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                           (202)672-5399
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               linear
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Truncated Human Cholesterol
7a-Hydroxylase, Method of Pi
5: 5
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                                                                                                                                                                                                                                                                               Version #1.25
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1.3;
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Best Local Similarity

47.0%; 66.7%;

Score 47; Pred. No.

DB 5.2;

1;

Length 482;

Query Match

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US-08-477-953-5
                                                                                                                                      RESULT 10
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       Sequence 5, Application US/08477953
Patent No. 5677159
GENERAL INFORMATION:
APPLICANT: CHIANG, John Young L
                                                                                                                                                                                                                                                                                                                                   Best
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SEQUENCE CHARACTERISTICS:
LENGTH: 482 amino acids
TYPE: amino acid
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APPLICATION NUMBER: US 08
FILING DATE: 13-OCT-1993
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FILING DATE: 21-DEC-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/135,511
FILING DATE: 13-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 18
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 13-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: SANDERCOCK, Colin G.
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Washington
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                                                                                                                                                                                                         347 DFTLHLEDGSYNIRK 361
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VENTION: Genomic DNA of Human Cholesterol
VENTION: 7a-Hydroxylase and Methods of Using It
                                                                                                                                                                                                                                                                                                            Conservative
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       John Young Ling
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Matches
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 482 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-DEC-1994
PRIOR APPLICATION UNBER: US 08/135,511
FILING DATE: 13-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 13-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: SANDERCOCK, COLIN G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 0: FILING DATE: 13-OCT-1993 PRIOR APPLICATION DATA:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                   APPLICANT: CHIANG, John Young Ling
TITLE OF INVENTION: Genomic DNA of Human Cholesterol
TITLE OF INVENTION: 7a-Hydroxylase and Methods of Using
NUMBER OF SEQUENCES: 11
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                                                                                                                                                                               ADDRESSEE: Foley & Lardner STREET: 3000 K Street, N.W
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                                                                                COUNTRY: USA
ZIP: 20007-5109
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66.7%;
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RESULT 12
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US-08-477-952-5
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Best Local Similarity
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INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 482 amino acids
TYPE: amino acid
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                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/135,511
FILING DATE: 13-0CT-1993
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
              ATTORNEY/AGENT INFORMATION:
NAME: SANDERCOCK, COLIN G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 18748/175
TELECOMMUNICATION INFORMATION:
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REFERENCE/DOCKET NUMBER: 18748/221 HOCE
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: US 08
FILING DATE: 13-OCT-1993
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TELEPHONE:
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(202)672-5399
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Regulatory Elements and Methods
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In Release #1.0, Version #1.25
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US-08-187-453-29
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                 Query Match
Best Local
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                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 18748/188
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                     FILING DATE: 13-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: SANDERCOCK, Colin G.
                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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CURRENT APPLICATION DATA:
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FILING DATE: 13-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 Local Similarity 66. les 10; Conservative
                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                          TOPOLOGY:
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66.7%;
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66.7%;
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Regulatory Elements and Transcription Factors
37
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Score 47; DB 1; Pred. No. 5.5; 0; Mismatches
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Pred. No. 5
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                               Length 503;
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369 DFTLHLEDGSYNIRK 383

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                                                                                                                                                                                                                                                                                                           RESULT 15
US-08-135-511-30
                                                                                                                                                                                                                                                      Sequence 30, Application US/08135511
Patent No. 5558999
GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 904136
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 504 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/1:
FILING DATE: 13-OCT-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: SANDERCOCK, COllin G.
REGISTRATION NUMBER: 31,298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COUNTRY: USA
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                              APPLICANT: Chiang, John
TITLE OF INVENTION: Cholesterol 7a-Hydroxylase Gene
TITLE OF INVENTION: Regulatory Elements and Methods for Using Them
NUMBER OF SEQUENCES: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 18
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Chiang, John
APPLICANT: Chiang, John
TITLE OF INVENTION: Cholesterol 7a-Hydroxylase Gene
TITLE OF INVENTION: Regulatory Elements and Methods for Using Them
WIMBER OF SEQUENCES: 35
                                                                                                                                                           NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 3000 K Street, N.W., Suite 500 CITY: Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: sin
TOPOLOGY: linear
                                                                                                          ADDRESSEE: Foley & Lardner STREET: 3000 K Street, N.W., Suite 500 CITY: Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                       369 DFTLHLEDGSYNIRK 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                           10; Conservative
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66.78;
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Pred. No.
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5.5;
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Search completed: July 11, 2003, 12:02:06 Job time: 4.39709 secs
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                                                                                                               Matches
                                                                                                                           Best Local Similarity
                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: SANDERCOCK, COLIN G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 1874
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEPAX: (202)672-5399
                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                 TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                    TELEFAX: (I
                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/135,511 FILING DATE: 13-OCT-1993
                                                                                                                                                                                                                                      LENGTH:
                                                         369 DFTLHLEDGSYNIRK 383
                                                                                                              10;
                                                                              5 DFTNHLEDTRRNINK 19
                                                                                                                                                                                                                     amino acids
                                                                                                              Conservative
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linear
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                                                                                                                                                                               peptide
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66.7%;
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Pred. No. 5.
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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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length: 2000000000
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Match
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Gapop 10.0 ,
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      445758 segs, 116419773 residues
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: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep: *
: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep: *
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: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep: *
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390
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US-09-140-719-34
10 US-09-140-719-34
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US-09-823-187-29
US-09-823-187-29
US-09-823-187-29
US-09-823-187-28
10 US-09-823-187-28
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Sequence 3, Appli
Sequence 34, Appl
Sequence 34, Appl
Sequence 29, Appli
Sequence 29, Appli
Sequence 27, Appl
Sequence 27, Appl
Sequence 30, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 41911, A
Sequence 21, Appl
Sequence 242, Appl
Sequence 242, App
Sequence 110, App
Sequence 110, App
Sequence 110, App
Sequence 110, App
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US-10-091-442-3
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39.5	39.5	Ö	40.0	40.5	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	N	42.0	42.0	42.0	44.0	44.0	44.0	44.0	45.0	45.0	45.0	45.0	45.0
761	745	433	150	1019	818	748	705	558	531	459	437	395	392	392	379	379	617	617	392	340	612	400	400	400	400
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US-10-011-582-10	US-10-000-823-4	US-09-738-626-6592	US-10-001-857-203	US-09-801-574-76	US-09-738-626-6491	US-10-128-714-8201	US-10-128-714-3201	US-09-941-831-28	US-10-156-761-14639	US-09-925-300-1440	us-09-925-301-1200	US-09-823-187-2	US-10-198-070-70	US-10-198-070-67	US-09-895-814-946	US-10-012-896-946	US-09-895-814-947	US-10-012-896-947	US-10-198-070-62	US-09-764-898-169	US-09-925-301-1358	US-09-897-778-112	US-09-850-716A-112	US-09-735-705-112	US-09-466-396A-112
10	Sequence 4, Appli	Sequence 6592, Ap	Sequence 203, App	•	Sequence 6491, Ap	Sequence 8201, Ap	Sequence 3201, Ap	Sequence 28, Appl	, 9	Sequence 1440, Ap	•	Sequence 2, Appli	70,	Sequence 67, Appl	Sequence 946, App	Sequence 946, App	Sequence 947, App	Sequence 947, App	Sequence 62, Appl	7	<u>-</u>	Sequence 112, App	Sequence 112, App	e 11	Sequence 112, App

ALIGNMENTS

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Sequence 3, Application US/10091442
Patent No. US20020164711A1
GENERAL INFORMATION:
APPLICANT: TSUJIMOTO, Masafumi
                  PRIOR APPLICATION DATA:

APPLICATION UNMBER: US/09/140,719

FILING DATE: 08-AUG-1998

APPLICATION NUMBER: US 08/474,661

FILING DATE: 07-JUN-1995

APPLICATION NUMBER: US 08/091,028

FILING DATE: 14-JUL-1993

APPLICATION NUMBER: JP 4-212305

FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                   ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compounts
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KURIHARA, Tatsuya
YAMAICHI, KOZO
YAMAGUCHI, NO. US20020164711Alomi
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                  CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Burns, Doane, STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IWASA, Fuyuki
TSUROUOKA, No. US20020164711Aluo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MIURA, Kenju
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NUMBER: JP 6-067339
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SEQUENCE DESCRIPTION: SEQ ID NO: 3: US-10-091-442-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Appl
Patent No. US200
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APPLICANT:
APPLICANT:
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SEQUENCE CHARACTERISTICS:
                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
                                                                       PRIOR APPLICATION DATA:
PRIOR APPLICATION UNMBER: JP 4-212305
                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
ATTORNEY/AGENT INFORMATION:
                                          FILING DATE: 17-JUL-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                            FILING DATE:
                                                                                                                                                                                                                             FILING DATE:
               FILING DATE:
                            APPLICATION NUMBER:
                                                             APPLICATION NUMBER: JP 4: FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                          STATE: Virginia COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                            APPLICATION NUMBER:
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TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION:
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19; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09140719
JS20010026931A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: McGowan, Malcolm K. REGISTRATION NUMBER: 39,3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 001560-247
                                                                                                                                                                                                                                                                                                                                                                                                                          E: Burns, Doa
P.O. Box 1404
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YAMAGUCHI, NO. US20010026931A1omi
VENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
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TSUROUOKA, NO. US20010026931A1uo
NAKAZATO, Hiroshi
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                 04-MAR-1993
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                                                                                                                             US 08/091,028
                              JP 6-067339
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                                                                                                                                                                                                                                                                           Version #1.30
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RESULT 3
US-10-091-442-34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (703) 836-20: INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                        ATTORNEY/AGENT INFORMATION:
NAME: McGowan, Malcolm K.
                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
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                                                                                                                             APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
APPLICATION NUMBER: JF 4-212305
FILING DATE: 17-JUL-1992
                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/10/091,442 FILING DATE: 07-Mar-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: P.O. Box 1404
CITY: Alexandria
                                                                                            APPLICATION NUMBER: JP 6-067339 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                   CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: Virginia
                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/140,719 FILING DATE: 08-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KURIHARA, Tatsuya
YAWAICHI, KOZO
YAWAGUCHI, NO. US20020164711A1omi
OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
R OF SEQUENCES: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Burns,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10091442
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linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22313-1404
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NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSUJIMOTO, Masafumi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MIURA, Kenju
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Pred. No. 6.8e-10;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Swecker & Mathis
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Patent No.
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Best Local Similarity
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                                                      TELEFAX: (703) 836-2021 (NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 34: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/474,661
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/091,028
FILING DATE: 14-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                 SEQUENCE CHARACTERISTICS:
LENGTH: 380 amino acids
                                                                                                 REFERENCE/DOCKET NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 001560-247
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                               APPLICATION NUMBER: JP 6
FILING DATE: 04-MAR-1993
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT: YAMAGUCHI, NO. US20010026931A10m1
TITLE OF INVENTION: MEGAKARYOCYTE DIFFERENTIATION FACTOR
NUMBER OF SEQUENCES: 34
                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-
FILING DATE: 17-JUL-1992
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 08-AU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Alexandria
                                                                                                                                              NAME: MCGOWAN, MALCOLM K. REGISTRATION NUMBER: 39,3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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                                                                                       TELEPHONE:
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amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          United States
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TSUROUOKA, No. US20010026931Aluo
NAKAZATO, Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 100; DB 9; larity 100.0%; Pred. No. 2.1e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MIURA, Kenju
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TSUJIMOTO, Masafumi
                                                                                           (703) 836-6620
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                                                                                                                                                                                                                                                                                JP 4-212305
                                                                                                                                                                                                                        JP 6-067339
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RESULT 6
US-09-823-187-29
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; MOLECULE TYPE:
US-08-731-566-2
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US-08-731-566-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                            Matches
                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE.

COUNTRY: USA
ZIP: 02109-1775
ZIP: 02109-1775
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
PC-DOS/MS-DOS
PAlease #1.0,
                                                                                                                                            Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                  TELEFAX: (617)227-5941
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: MG TELECOMMUNICATION INFORMATION: TELEPHONE: (617)227,7400
                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 17-OCT-1995
ATTORNEY/AGENT INFORMATION:
NAME: Louis Myers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Toshihiko Hibino et al.
TITLE OF INVENTION: TWO NOVEL GENES FROM PSORIATIC EPIDERMIS:
TITLE OF INVENTION: PSORIASTATIN TYPE I AND PSORIASTATIN TYPE II
                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 60/013,755 FILING DATE: 20-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/731,566 FILING DATE: 16-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                               131 VESVDFANAPEESRKKIN 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         126 VERVDFTNHLEDTRRNINK 144
                                                                                                                            10;
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                                                                                1 VERVDFTNHLEDTRRNIN 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Boston
                                                                                                                                                                                                                                     amino acid
                                                                                                                                                                                                                                                       390 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28 State Street
                                                                                                                                                                                                                                                                                                   (617)227-5941
                                                                                                                            Conservative
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55.6%;
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                                                                                                                                           Score 50;
Pred. No.
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Pred. No. 2.1e-08;
                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                           DB 7;
                                                                                                                                                          Length 390
                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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                                                                                                                            0
                                                                                                                            Gaps
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Sequence 29, Application US/09823187
Publication No. US20030096952A1
GENERAL INFORMATION:
APPLICANT: Burgess, Catherine

Vladimir Y

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US-09-823-187-30
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US-09-823-187-29
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Best Local S
Matches 10
                                                                                                          APPLICANT: APPLICANT: APPLICANT: APPLICANT:
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APPLICANT:
APPLICANT:
              CURRENT APPLICATION NUMBER: US/09/823,187
CURRENT FILING DATE: 2001-03-29
PRIOR APPLICATION NUMBER: 60/193,339
PRIOR FILING DATE: 2000-03-30
                                                                              APPLICANT: Taupier, Raymond J
TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
FILE REFERENCE: 15966-745
                                                                                                                                                                                             APPLICANT:
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TYPE: PRT
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FILING DATE: 2000-04-05
APPLICATION NUMBER: 60/195,088
FILING DATE: 2000-04-06
APPLICATION NUMBER: 60/193,205
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                                                                                                                                          Patturajan, Meera
Shimkets, Richard A
Spaderna, Steven K
                                                                                                                                                                                          Majumder, Kumud
Padigaru, Muralidhar
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Gusev, Vladimir Y
                                                                                                                           Spytek, Kimberly
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Spaderna, Steven K
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Padigaru, Muralidhar
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Pred. No. 3,
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PRIOR APPLICATION NUMBER: 60/193,339
PRIOR FILING DATE: 2000-03-30
                                  PRIOR FILING DATE: 2000-04-13
PRIOR APPLICATION NUMBER: 60/197,525
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TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS
FILE REFERENCE: 15966-745
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PRIOR FILING DATE: 2000-04-14
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APPLICATION NUMBER: 60/197,087
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                                                                                                    APPLICATION NUMBER: 60/196,556
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FILING DATE: 2000-04-06
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Shimkets, Richard A
Spaderna, Steven K
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Padigaru, Muralidhar
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Vladimir Y
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55.6%;
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Pred. No. 3;
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Best Local Similarity
"arches 9; Conserva
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PRIOR FILING DATE: 2000-03-30
PRIOR PELICATION NUMBER: 60/193,205
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/195,343
PRIOR APPLICATION NUMBER: 60/195,088
PRIOR APPLICATION NUMBER: 60/195,088
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Best Local
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SEQ ID NO 27
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CURRENT FILING DATE: 2001-03-29
                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 103
SOFTWARE: Data-tr
                                                                                                                                                                                                                     PRIOR FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/197,087
PRIOR FILING DATE: 2000-04-14
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OR APPLICATION NUMBER: 60/195,792
OR FILING DATE: 2000-04-10
OR FILING DATE: 2000-04-11
OR APPLICATION NUMBER: 60/197,081
OR APPLICATION NUMBER: 60/197,081
OR FILING DATE: 2000-04-13
OR APPLICATION NUMBER: 60/197,525
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                 1 VERVDETNHLEDTRRNIN 18
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                                                                          Similarity
VESTDFANAPEESRKKIN 148
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Padigaru, Muralidhar
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Spaderna, Steven K
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Pred. No.
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                                                                                           CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 41911, Application US/09864761
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PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,866
PRIOR FILING DATE: 1999-05-12
PRIOR APPLICATION NUMBER: 60/133,867
PRIOR FILING DATE: 1999-05-12
                                                                                                                                                                                                                                                                                                   APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aeomica-X-1
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                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Penn, Sharron G. APPLICANT: Rank, David R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/0 CURRENT FILING DATE: 2001-07-20
                                               PRIOR APPLICATION NUMBER: GB 24263.6 PRIOR FILING DATE: 2000-10-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1993-09-21
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PRIOR FILING DATE:
                          PRIOR APPLICATION NUMBER: US 60/236,359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1999-05-12
APPLICATION NUMBER: 60/133,873
FILING DATE: 1999-05-12
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2000-09-27
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APPLICATION NUMBER: PCT/US01/00669 FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT/US01/00665

APPLICATION NUMBER: PCT FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT FILING DATE: 2001-01-30

PCT/US01/00667 L-30 PCT/US01/00664

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                                                                            SOFTWARE: PatentIn Ver.
SEQ ID NO 21
LENGTH: 123
TYPE: PRT
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                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/073,979
CURRENT FILING DATE: 2002-02-14
                                                                                                                                                                                                                               APPLICANT: Rosen et al. TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PTZ31C1
                                                                                                                                                      Prior Application removed - See file Wrapper NUMBER OF SEQ ID NOS: 22
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FEATURE:
NAME/KEY: misc_feature
LOCATION: (88)
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OTHER INFORMATION: EXPRESSED IN BRAIL
OTHER INFORMATION: EXPRESSED IN PLAC
                                                       ORGANISM: Homo sapiens
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Local Similarity 57.1%;
les 8; Conservation
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FILING DATE: 2000-66-30
APPLICATION NUMBER: US 09/774,203
FILING DATE: 2001-01-29
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FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00663
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00662
FILING DATE: 2001-01-30
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VEFTNPLKETLRNV 28
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HIT: AV733491.1,
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Pred. No. 1
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IN HELA, SIGNAL = 2.1
IN LUNG, SIGNAL = 3.8
IN FETAL LIVER, SIGNAL = 2.1
III: P00488, EVALUE: 8.00e-21
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BONE MARROW, SIGNAL = 2.1
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; FEATURE:
; NAME/KEY: SITE
; LOCATION: (88)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-764-898-242
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US-09-764-891-4883
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                                                          Best
                                                                          Query Match
                                                                                                                                                                                                             SEQ ID NO 242
LENGTH: 123
                                                                                                                                                                                                                                                                                                                                                             Patent No. US20020090673A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 242, Application US/09764898
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LENGTH: 123
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                                                                                                                                                                                                                                                                                                                APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PJZ01
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TITLE OF INVENTION: Nuc
FILE REFERENCE: PC006
                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                       Prior application data removed NUMBER OF SEQ ID NOS: 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Prior application data removed - consult PALM NUMBER OF SEQ ID NOS: 10231 SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                ORGANISM: Homo
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nes 8; Conserv
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1 VERVDFTNHLEDTRRNIN
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82 LQTVDFXQSTEETRKTIN 99
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8; Conserv
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LQTVDFXQSTEETRKTIN 99
                                              Conservative
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                18
                                            Score 45; DB
Pred. No. 5.3;
4; Mismatches
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Pred. No.
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Pred. No.
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RESULT 15
US-10-157-031-355
; Sequence 355, Application US/10157031
; Publication No. US20030108890A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                            APPLICANT: Warknovsky, N. K.
APPLICANT: Yonkovsky, N. K.
APPLICANT: Kozlov, A. P.
APPLICANT: Kozlov, A. P.
APPLICANT: Lobashev, A. V.
APPLICANT: Krukovskaya, L. L.
TITLE OF INVENTION: In silico screening for phenotype-associated expressed sequences
FILE REFERENCE: 2760-103
CURRENT APPLICATION NUMBER: US/10/157,031
CURRENT FILING DATE: 2002-05-30
NUMBER OF SEQ ID NOS: 415
SOFTWARE: Patentin version 3.1
SEQ ID NO 355
LENGTH: 391
TYPE: PRT
ORGANISM: Homo sapiens
Search completed: July 11, 2003, 12:37:32 Job time: 5.56965 secs
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                                                                                                                                                                   Query Match 45.0%; Score 45; DB Best Local Similarity 44.4%; Pred. No. 20; Matches 8; Conservative 5; Mismatches
                                                                                1 VERVDFTNHLEDTRRNIN 18
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132 LEPVDFVNAADESRKKIN 149
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Minimum DB
Maximum DB
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.5
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VERVDFTNHLEDTRRNINK 19
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SYHOMA
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Gene: GDB:SCCA1; SCC Cross-references: GDB:625364; OMIM:600 Cross-references: GDB:625364; OMIM:600 Map position: 18q21.3-18q21.3 Introns: 55/3; 74/3; 117/3; 157/1; 204 Superfamily: antithrombin III Keywords: cysteine proteinase inhibito 65,93,171,376/Binding site: carbohydra 354/Inhibitory site: Ser (cathepsin L)	n 37;240-256;303-325 < probably acts as a	Molecule type: mRNA Molecule type: mRNA Residues: 1-350,'G',352-356,'A',358-390 <s Cross-references: GB:S66896; NID:g239551;</s 	Kesidues: 1-350, G, 352-350 <sil> Cross-references: EMBL:U19556; NID:g1276435; Suminami, Y.; Kishi, F.; Sekiguchi, K.; Katt ochem. Biophys. Res. Commun. 181, 51-58, 199 Title: Squamous cell carcinoma antigen is a Reference number: JT0966; MUID:92068241; PMJ Accession. TT0066</sil>	Reference number: G07968 Accession: G01631 Status: preliminary; translated from GB/EW Molecule type: mRNA	s: EMBL:U19562; NID:g897835; EMBL Data Library, January 19	: nuc : nuc le ty	;Molecule type: DNA;Residues: 1-390 <sch1>;Cross-references: EMBL:U19568; GB:U19558;</sch1>	Tit. Refe Acce	squamous cell carcinoma antigen.1 - human C;Species: Homo sapiens (man) C;Date: 23-Feb-1996 #text C;Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text C;Accession: I38201; I38200; G01631; J70966; J70967 R;Schneider, S.S.; Schick, C.; Fish, K.E.; Miller, E.; FProc. Natl Acad. Sci. U.S.A. 92, 3147-3151, 1995	ALIGNMENTS RESULT 1 138201	41 41.0 31/ 2 41 41.0 319 2 41 41.0 347 2	39 42 42.0 602 2 S23991 40 42 42.0 957 2 H69141 41 41.5 349 2 AH1764 42 41 41.0 288 2 AD0884	42.5 42.5 409 2 42 42.0 399 2 42 42.0 589 2	43 43.0 732 1 43 43.0 1111 2 43 43.0 1461 2 43 43.0 1619 2	43 43.0 363 2 43 43.0 468 2
517 /3; 256/3 r; glycoprotein te (Asn) (covalent) #status predicted #status predicted	SUM2> proteinase inhibitor to modulate the host	UM1> PIDN:AAB20405.1; PID:g239552	PID:g1052869), H.)1 new member of the serine protease inhib [D:1958219	DDBJ	PIDN:AAA86316.1; PID:g897844 955		NID:91172085	18q21.3 contains a tandem duplication 7724531	996 #text_change 26-May-2000 9967 s; E.; Pena, J.C.; Treter, S.D.; Hui,		molybdate-binding K06H7.6 protein -	conjugative transf hypothetical prote B. subtilis probab probable transfera	hypothetical prote hypothetical prote RNA/ssDNA-binding	protein-glutamine probable arabinosy hypothetical prote hypothetical prote	het het

Query Match Best Local Similarity

50.0%;

Score 50; DB 2; Pred. No. 3.3;

Length 390;

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cholesterol 7alpha-monooxygenase (EC 1.14.13.17) - C:Species: Oryctolagus cuniculus (domestic rabbit) C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 C:Accession: I46701 R;Kai, M.; Eto, T.; Kondo, K.; Setoguchi, Y.; Higas J. Lipid Res. 36, 367-374, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nature 390, 580-586, 1997
A; Authors: Smith, H.O.; Venter, J.C.
A; A; Authors: Smith, H.O.; Venter, J.C.
A; Title: Genomic sequence of a Lyme disease spirochaete, Borrelia burgdorferi.
A; Reference number: A70100; MUID: 98065943; PMID: 9403685
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C;Species: Cænorhabditis elegans
C;Date: 15-Oct-1999 #sequence_rev
C;Accession: T27755
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A; Cross-references: GB: AE001164; GB: AE000783;
A; Cross-references: Strain B31
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H70178
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                                                                                                             I46701
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66.7%;
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42.1%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sutton, G.G.; Clayton, R.; Lathigra, R.; uackenbush, J.; Salzberg, S.; Hanson, M.; ton, M.D.; Horst, K.; Roberts, K.; Hatch,
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16;
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8.5;
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                       Higashi,
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                                                      #text_change 04-Mar-2000
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                       Maeda,
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A; Residues: 1-503 <LIA>
                                                                                                        A; Reference number: A; Accession: A37071
                                                                                                                                                                                                                                                                                               R; Noshiro, M.; Nishimoto, M.; FEBS Lett. 257, 97-100, 1989
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A; Residues: 1-503 < NOS1>
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A35376
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C;Genetics:
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A; Residues: 1-26 < JEL2>
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A; Residues: 1~503 < JE
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A;Gene: CYP7
C;Superfamily: human cytochrome P450 CYP7A1; cytochrome P450 homology C;Superfamily: human cytochrome P450 cyP7A1; cytochrome P450 homology C;Reywords: chromoprotein; heme; iron; metalloprotein; oxidoreductase; F;279-463/Domain: cytochrome P450 homology <P45>
F;441/Binding site: heme iron (Cys) (axial ligand) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                  A;Title: Synchronous circadian rhythms of mRNA levels and activities A;Reference number: I46701; MUID:95271192; PMID:7751825 A;Accession: I46701
                                                                                                                                                                                                                                                                                                                                                              A; Status: preliminary; translated
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10; Conserv
DFTLHLEDGSYNIRK
                                        DFTNHLEDTRRNINK
                                                                                    Conservative
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66.7%;
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cholesterol 7alpha-monooxygenase (EC 1.14.13.17) - rat
N;Alternate names: cholesterol 7alpha-hydroxylase
C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 21C;Accession: A35376; A35609; A36450; S06632; A37071; A38736; S27206
R;Jelinek, D.F.; Andersson, S.; Slaughter, C.A.; Russell, D.W.
J. Biol. Chem. 265, 8190-8197, 1990
A:Title: Cloning and regulation of cholesterol 7alpha-hydroxylase, t
A;Reference number: A35376; MUID:90243699; PMID:2335522
A;Accession: A35376 R:Jelinek, D.F.; Russell, D.W. Biochemistry 29, 7781-7785, 1990 A:Tille: Structure of the rat gene encoding cholesterol A:Reference number: A35609; MUID:91084435; PMID:2261433 A;Residues: 1-503 <JEL1> A;Cross-references: GB:J05430; NID:g203792; PIDN: AAA41041.1; PID:g203793 the rate-limiting

A; Cross-references: GB:J02926 R; Noshiro, M.; Nishimoto, M.; Okuda, <u>.</u>

J. Biol. Chem. 265, 10036-10041, 1990
A;Title: Rat liver cholesterol 7alpha-hydroxylase. Pretranslational regulation A;Reference number: A36450; MUID:90277612; PMID:1693613
A;Accession: A36450

PID: g203456

for Ci

rat

A;Title: Molecular cloning of cDNA for cholesterol 7alpha-hydroxylase A;Reference number: S06632; MUID:90033362; PMID:2806567 A;Accession: S06632 from

A; Molecule type: mRNA A; Residues: 1-503 < NOS2>

A;Cross-references: GB:X17595; NID:g57535; PIDN:CAB57878.1; R;Li, Y.C.; Wang, D.P.; Chiang, J.Y.L. J. Biol. Chem. 265, 12012-12019, 1990 PID:g6018697

A; Title: Regulation of of cholesterol 7alpha-hydroxylase in A37071; MUID:90307735; PMID:1694852

the

liver. Cloning,

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A;Cross-references: GB:J05509; NID:g203204; PII R;Nishimoto, M.; Gotoh, O.; Okuda, K.; Noshiro, J. Biol. Chem. 266, 6467-6471, 1991 PIDN: AAA40839.1; PID: g203205

Structural analysis O.F. the gene encoding rat cholesterol alpha-hydroxylase,

PID: g181319

human cholesterol

PID: 9553228

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RESULT 7
JH0659
cholesterol 7alpha-monooxygenase (EC 1.14.13.17) chain 1 - human
cholesterol 7alpha-monooxygenase (EC 1.14.13.17) chain 1 - human
N;Alternate names: cholesterol 7alpha-hydroxylase; cytochrome P450, subfamily VIIA
C;Species: Homo sapiens (man)
C;Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 03-Mar-2000
C;Accession: S29818; JH0659; S11051; A42201; A54310
R;Nishimoto, M.; Noshiro, M.; Okuda, K.
Biochim. Blophys. Acta 1172, 147-150, 1993
A;Title: Structure of the gene encoding human liver cholesterol 7alpha-hydroxylase.
A;Reference number: S29818; MUID:93176797; PMID:8439551
A;Accession: S29818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: CYP7
C;Superfamily: human cytochrome P450 CYP7Al; cytochrome P450 homology C;Superfamily: human cytochrome P450 CYP7Al; cytochrome P450 homology C;Keywords: Chromoprotein; heme; iron; metalloprotein; oxidoreductase; F;282-466/Domain: cytochrome P450 homology <P45>
F;484-466/Domain: cytochrome P450 homology <P45>
F;444/Binding site: heme iron (Cys) (axial ligand) #status predicted
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C;Accession: A54779
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Blochim. Blophys. Acta 1132, 337-339, 1992
A;Title: Cloning and 5'-flanking sequence of a rat cholesterol 7alpha-hydroxylase
A;Reference number: S27206; MUID:93041942; PMID:1420318
A;Accession: S27206
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C;Superfamily: human cytochrome P450 CYP7A1; cytochrome P450 homology
C:Keywords: cholesterol metabolism; chromoprotein; electron transfer;
F;282-466/Domain: cytochrome P450 homology <P45>
F;444/Binding site: heme iron (Cys) (axial ligand) #status predicted
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A;Molecule type: DNA
A;Residues: 1-503 <TZU>
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A;Title: Structure of the mouse cholesterol 7alpha-hydroxylase A;Reference number: A54779; MUID:94375022; PMID:8088795
A;Accession: A54779
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A; Residues: 1-26 <CHI>
A; Residues: 1-26 <CHI>
A; Cross-references: GB:Z14108; GB:S48135; NID:955835; PIDN:CAA78481.1; PID:955836
C; Comment: This liver microsomal enzyme catalyzes the conversion of cholesterol to
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A;Map position: 8q11-8q12
A;Introns: 27/2; 107/3; 303/2; 347/1; 405/3
C;Superfamily: human cytochrome P450 CYP7A1; cytochrome P450 homology C;Keywords: cholesterol metabolism; chromoprotein; electron transfer; F;282-466/Domain: cytochrome P450 homology <CYP>F;444/Binding site: heme iron (Cys) (axial ligand) #status predicted
                                         A;Title: Genomic cloning, se
A;Reference number: S39399;
A;Accession: S39399
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A;Title: Structure and nucleotide sequences of the human cholesterol 7 a A;Reference number: A54310; MUID:94292222; PMID:8020987
A;Accession: A54310
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A: Residues: 1-346, 'W', 348-384, 'S', 386-504 < NOS>
A: Cross-references: GB: M93133
R: Molowa, D.T.; Chen, W.S.; Cimis, G.M.; Tan, C
Biochemistry 31, 2539-2544, 1992
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                                                                                                                    C; Accession: S39399
R; Crestani, M.; Galli, C
R; Chestani, Biophys.
                                                                                                                                                                                               cholesterol 7alpha-monooxygenase (EC 1.14.13.17)
N;Alternate names: cholesterol 7alpha-hydroxylase
C;Specles: Cricetulus griseus (Chinese hamster)
C;Date: 07-Oct-1994 #sequence_revision 01-Dec-1995
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A;Residues: 1-140 <RES>
A;Cross-references: GB:Ll3460; NID:g499855; PIDN:AAA61350.1; PID:g624966
A;Cromment: This liver microsomal enzyme catalyzes the conversion of cholesterol to
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A;Title: Polymorphisms of human cholesterol 7 alpha-hydroxylase
A;Reference number: JH0659; MUID:92304280; PMID:1610352
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A; Cross-references: EMBL:L04633
R; Karam, W.G.; Chiang, J.Y.L.
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A; Cross-references: GDB:
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A; Residues: 1-504 <KAR>
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399; MUID:94029018;
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Ride Zeeuw, C.I.; Hoogenradu, ....,
Ride Zeeuw, C.I.; Hoogenradu, ....,
Neuron 19, 1187-1199, 1997
A;Title: CLIP-115, a novel brain specific of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company of the company 
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C;Superfamily: human cytochrome P450 CYP7A1; cytochrome P450 homology
C;Keywords: chromoprotein; heme; iron; metalloprotein; oxidoreductase
F;282-466/Domain: cytochrome P450 homology <P45>
F;444/Binding site: heme iron (Cys) (axial ligand) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytoplasmic linker protein CLIP-115 - rat C;Speckes: Rattus norvegicus (Norway rat) C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 C;Accession: T42734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
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A;Title: The murine CYLN2 gene: genomic organisation, chromosome loca; Reference number: Z22240; MUID:99017971; PMID:9799601
A;Accession: T42720
                                                                                                                                                                                                                                A; Molecule type:
A; Residues: 1-104
                                                                                                                                                                                                                                                                            A; Status: preliminary; translated
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A; Residues: 1-504 <CRE>
A; Cross-references: GB:
C; Genetics:
                                                                                     A; Description:
                                                                                                                                                A; Gene:
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A;Experimental source: strain 129
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A; Residues: 1-1046 <HOO>
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                                                        to operate in dendritic lam
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A; Gene: GDB:SCCA2; PII1
A; Cross-references: GDB:636556; OMIM:600518
A; Map position: 18q21.3-18q21.3
A; Introns: 55/3; 74/3; 11/3; 157/1; 204/3; C; Superfamily: antithrombin III
C; Keywords: glycoprotein; serine proteinase F; 1-22/Domain: signal sequence #status nred;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N;Alternate names: proteinase inhibitor 11 (PII1); squam (;Species: Homo sapiens (man) (;Species: Homo sapiens (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pink) (pi
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A;Residues: 7-351,'V',353-384 <BAR>
A;Cross-references: EMBL:X89015; NID:g887464;
                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: EMBL:U19576; GB:U19569; NID:g852466 R;Barnes, R.C.; Worrall, D.M. FEBS Lett. 373, 61-65, 1995 A;Title: Identification of a novel human serpin gene; C. A;Reference number: S66675; MUID:96013887; PMID:7589435
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A; Map position: 18q21.3-18q21.3
C; Superfamily: antithrombin III
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C;Species: Homo sapiens (man)
C;Date: 23-Feb-1996 #sequence_revision 23-Feb-1996 #text_change 16-Jul-1999
                                                                                                                                                                                                                           C; Genetics:
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A; Residues: 1-390 <SCH>
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Science 263, 526-529,
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C;Comment: The high likelihood that this serine proteinase inhibitor of no
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A; Residues: 1-375 <RES>
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;Reywords: glycoprotein; serine proteinase inhibitor; Reywords: signal sequence #status predicted <SIG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
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er: A36898; MUID:9412
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1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50.0%;
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                                                                                           157/1; 204/3;
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Pred. No.
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7; PMID:7589435
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14;
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                                                                                                                                                                                                                                                            PIDN:CAA61420.1; PID:g887465
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pena, J.C.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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R; Erondu, N.E.; Donelson, J.E.

Mol. Biochem. Parasitol. 40, 213-224, 1990

A;Title: Characterization of a myosin-like antigen from Onchocerca volvulus.

A;Reference number: A44939; MUID:90301142; PMID:2194123

A;Accession: A44939

A;Molecule type: mRNA

A;Residues: 733-874, 'E',876-916,'S',918-1038,1040-1047,'S',1049-1283,'E',1285-1363 <ERO>
A;Cross-references: GB:M30398

A;Note: the sequence is revised in GenBank entry ONGANTML, release 115, (PIDN:AAA29413.1

R;Donelson, J.E.; Duke, B.O.L.; Moser, D.; Zeng, W.; Erondu, N.E.; Lucius, R.; Renz, A.;

Mol. Biochem. Parasitol. 31, 241-250, 1988

A;Title: Construction of Onchocerca volvulus cDNA libraries and partial characterization A;Reference number: A54513; MUID:89127417; PMID:2464764

A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                         Ovt1 protein - nematode (Onchocerca volvulus)

N;Alternate names: myosin-like antigen

C;Species: Onchocerca volvulus

C;Species: Onchocerca volvulus

C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 20-Jun-2000

C;Accession: T43214; A44939; A54513; S27825

C;Accession: T43214; A44939; A54513; S27825

C;Accession: T43214; A44939; A54513; S27825

A;Title: Molecular cloning of a gene expressed during early embryonic development in O A;Reference number: Z22341; MUID:95287898; PMID:7770081

A;Accession: T43214

A;Status: prelininary: translated from GB/EMBL/DDBJ

A;Molecule type: mRNA

A;Residues: 1-2012 (TRI)

A;Cross-references: EMBL:012681; NID:9530824; PID:9530825; PIDN:AAA80009.1

A;Experimental source: specific_host Homo sapiens

R;Erondu, N.E.; Donelson, J.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X74162;
C;Superfamily: tetanus toxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              neurotoxin - Clostridium botulinum
c;Species: Clostridium botulinum
C;Date: 07-Oct-1994 #sequence_revision 01
C;Accession: S39791
R;Campbell, K.; Collins, M.D.; East, A.K.
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S39791
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A;Title: Nucleotide sequence of the gene coding for Clostridium A;Reference number: S39791; MUID:94092745; PMID:8268233
A;Accession: S39791
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F;65,93,170,376/Binding site: carbohydrate (Asn) (covalent) #status
F;354/Inhibitory site: Leu (unidentified proteinase) #status predict
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9; Conserv
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Search completed: July 11, Job time: 5.9316 secs

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A;Cross references: GB.J03995; NID:g159874; PIDN:AAA29412.1; PID:g159875
R:N90zl, E.; Erondu, N.E.; Donelson, J.E.
submitted to the EMBL Data Library, April 1990
A;Description: Characterization of a myosin-like antigen from Onchocerca volvulus.
A;Reference number: S27825
A;Accession: S27825
A;Molecule type: mRNA
A;Residues: 733-874, 'E',876-916, 'S',918-1038,1040-1047, 'S',1049-1283, 'E',1285-1347, 'E
A;Cross-references: EMBL:M30398; NID:g159876; PIDN:AAA29413.1; PID:g159877
                                                                                                                                                                                            A;Cross-references:
C;Genetics:
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R;Bult, C.J.; White, O.; Olsen, G.J.; Zhou, L.; Fleischmann, R.D.; Sutton, G.G.; Blak R;Bult, C.J.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, rson, J.D.; Sadow, P.W.; Hanna, M.C.; Cotton, M.D.; Roberts, K.M.; Hurst, M.A. Science 273, 1058-1073, 1996
A;Authors: Kaine, B.P.; Borodovsky, M.; Klenk, H.P.; Fraser, C.M.; Smith, H.O.; Woese A;Title: Complete genome sequence of the methanogenic archaeon, Methanococcus Jannasc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein MJ1021 - Methanococcus jannaschii
C;Species: Methanococcus jannaschii
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
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C;Keywords: leucine zipper
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A; Cross-references:
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A; Residues: 1-163 <BUL>
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A;Accession: D64427
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: July 11, 2003, 11:43:41; Search time 1.81705 Seconds (without alignments) 433.698 Million cell updates/sec

Title: Perfect score: Sequence: US-10-091-442-3 100 1 VERVDFTNHLEDTRRNINK 19

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 112892 segs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Squamous cell carcinoma antigen 1 (SCCA-1) (Protein SERPINB3 OR SCCA1 OR SCCA.
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Schneider S.S., Schick C., Fish K.E.,
Treter S.D., Hui S.M., Silverman G.A.
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"Squamous cell carcinoma antigen
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                                                                                                                                                                                                                                                    send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mitted (MAR-2001) to the EMBL/GenBank/DDBJ FUNCTION: MAY ACT AS A PROTEASE INHIBITOR IMMUNE RESPONSE AGAINST TUMOR CELLS.
SUBCELLULAR LOCATION: Cytoplasmic.
TISSUE SPECIFICITY: SQUAMOUS CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                         DEVELOPMENTAL STAGE: ITS EXPRESSION IS CLOSELY RELATED TO CELL DIFFERENTIATION IN BOTH NORMAL AND MALIGNANT SQUAMOUS CELLS. SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
; $66896; AAB20405.1; U19556; AAA8975521; U19558; AAA86317.1; U19560; AAA86317.1; U19560; AAA86317.1; U19567; AAA86317.1; U19567; AAA86317.1; U19567; AAA86316.1; U19569; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U19559; AAA86316.1; U195
                                                                                                                                                                                                                                                                                                    SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         126
                                                                                                                                                                                                                                                    an email to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PubMed=1958219;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Res. Commun.
                                                                                                                                                                                                                                                  license@isb-sib.ch).
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9A2CDB6C63CFF605
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Pred. No. 1
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member
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MODULATE THE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a tandem gene.";
                                                                                                                                                                                                                                                                                            for
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RESULT
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Best Local
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                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.

STRAIN=ATCC 35210 / B31;

MEDLINE=98065943; PubMed=9403685;

Fraser C.M., Casjens S., Huang W.M., Sutton G.G., Clayton R.A., Lathigra R., White O., Ketchum K.A., Dodson R., Hickey E.K., Gwir Dougherty B., Tomb J.-F., Fleischmann R.D., Richardson D., Peterson J., Kerlavage A.R., Quackenbush J., Salzberg S., Hanson van Vugt R., Palmer N., Adams M.D., Gocayne J.D., Weidman J., Utterback T., Watthey L., McDonald L., Artiach P., Bowman C., Garland S., Fujii C., Cotton M.D., Horst K., Roberts K., Hatch B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hbu.
Genew; hu.
Genew; 600517;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Exodeoxyribonuclease V beta chain (EC 3.1.1)
RECE OR BB0633.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Serpin; S
ACT_SITE
CONFLICT
                                              use by non-profit institutions as lon modified and this statement is not removentitles requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EX5B_BORBU
051578;
                                                                                       the European use by non-
                                                                                                                                                                                                                                                                                                            "Genomic sequence of burgdorferi.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Borrelia burgdorferi (Lyme Bacteria; Spirochaetales; S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BORBU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000215; Serpi
Pfam; PF00079; Serpin; 1.
SMART; SM00093; SERPIN; 1.
PROSITE; PS00284; SERPIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIR; JT0966; JT0966.
HSSP; P01008; 1ATH.
                                                                                                                                                                                                                                                                                                   Nature 390:580-586(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                     (BY SIMILARITY).

CATALYTIC ACTIVITY: Exonucleolytic ATP) in either 5'- to 3'-or 3'- to
                                                                                                                                                                   phosphooligonucleotides.
SUBUNIT: CONSIST OF THRE
(BY SIMILARITY).
                                                                                                                                                                                                                                            FUNCTION: REQUIRED FOR EFFICIENT DNA REPAIR; IT CATALYZES THE UNWINDING OF DOUBLE-STRANDED DNA AND THE CLEAVAGE OF SINGLE-STRANDED DNA AND IT STIMULATES LOCAL GENEFIC RECOMBINATION. ALL OF THESE ACTIVITIES REQUIRE CONCOMITANT HYDROLYSIS OF ATP
                                                                                                                                                        SIMILARITY: BELONGS
                                                                                                               SWISS-PROT entry is copyright. It is produced through een the Swiss Institute of Bioinformatics and the EW
                        AE001164; AAC66981.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131
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E 354 355 REAC
T 357 357 T ->
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357
390 AA;
                                                                                     Bioinformatics Institute. The profit institutions as long
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       44564 MW;
                                                                                                                                                                                                                                                                                                                          a Lyme disease spirochaete,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Serpin
                                                                                                                                                     TO THE HELICASE FAMILY. UVRD SUBFAMILY.
                                                                                                                                                                                THREE SUBUNITS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Spirochaetaceae; Borrelia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease spirochete).
                                                                          is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
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Pred. No. 1.2;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REACTIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
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E5F27F986C752CFA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BOND
                                                             (See http://www.isb-sib.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 update)
3.1.11.5).
                                                                                                                                                                                                         cleavage (in 5'-direction
                                                                                                    There are no
                                                                                                                                                                               RECB,
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1.2;
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                                                                                                                EMBL outstation
                                                                                                                     a collaboration
MBL outstation -
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Lomax M.I.;

overlapping

restrictions

EMBL outstation a collaboration -

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RESULT
NOC4_HU
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Best Local S
Matches 8
                            Query Match
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Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
InterPro;
Pfam; PFO
                                                                                                                                            EMBL; AF005888; AAB94489.1; -. EMBL; AF005889; AAB94820.1; -. EMBL; BC005886; AAH05886.1; -. EMBL; BC001472; AAH01472.1; -.
                                                                                                                                                                                                                      the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
MCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Neighbor of COX4.
NOC4 OR COX4AL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOC4_HUMAN
043402;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00580; UvrD-hellcase; 1.
TIGRFAMs; TIGR00609; recB; 1.
Hydrolase; Nuclease; Endonuclease;
DNA repair; Complete proteome.
NP_BIND 18 25 ATP (POTENTIAL).
                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                      TISSUE-Retina, and placenta;
MEDLINE-99269920; PubMed-1037626;
Bachman N.J., Wu W., Schmidt T.R., Gr
"The 5-prime region of the COX4 gene
                                                                                                                                 Genew;
                                                                                                                                                                                                                                                                                                                                                                                             Strausberg R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE=Retina, and
                                                                                                                                                                                                           or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                       InterPro; IPR005366; UPF0172.
                                                                                                                                                                                                                                                                                                                                                                                                          rissue-Placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Mamm. Genome 10:506-512(1999).
                                                                                                                                                                                                                                                                                                                SIMILARITY: BELONGS TO THE UPF0172 (NOC4) FAMILY.
                                                                                                                     604886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   459
                                                                                           PF03665;
                                                                                                                                 HGNC:7864; NOC4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
8; Conserv
                                        Similarity
                                                                                                                                                                                                                                                                                                                               placenta.
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    VDFTNHLEDTRRN----INK 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IPR004586; RecB.
IPR000212; UvrD-helicase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1169 AA;
                                                                               210
                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                           UPF0172; 1.
AA; 23773 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                        48.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49.0%;
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                          <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 49; DB Pred. No. 5.8; 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
                                        Score 48.5;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                              41367FDD98769250 CRC64;
                          M1smatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (POTENTIAL).
B61D63C1C959B91F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grossman L.I., Lomax M.I.; ne contains a novel overlapping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 210
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8
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                                                   Length 210;
                            Indels
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                          <u>ა</u>
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                                                                                                                                                                                                                                                                                                                                          muscle
                                                                                                                                                                                                                                                                                                                                                   lung,
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                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
NOC4_MOUSE
                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                             CP7A_RABIT STANDARD; PRT; 501 AA.
P51542;
01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Cytochrome P450 7A1 (cholesterol 7-alpha-monooxygenase)
(EC 1.14.13.17) (Cholesterol 7-alpha-hydroxylase).
CYP7A1 OR CYP7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NOC4_MOUSE
070378;
"Synchronous circadian rhythms of mRNA levels and cholesterol 7 alpha-hydroxylase in the rabbit and J. Lipid Res. 36:367-374(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entitles requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                               STRAIN-New Zealand white;
MEDLINE-95271192; PubMed=
Kai M., Eto T., Kondo K.,
                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                            Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                            RABIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AF052621; AAC12933.1; -. MGD; MGI:1343095; Noc4. InterPro; IPR005366; UPF0172.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mamm. Genome 10:506-512(1999).
-!- SIMILARITY: BELONGS TO THE UPF0172 (NOC4) FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene, NOC4.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-C57BL/6J; TISSUE-Kidney; MEDLINE-99269920; PubMed-1037626; Bachman N.J., Wu W., Schmidt T.R., Gr "The 5-prime region of the COX4 gene
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Mammalia; Eutheria;
                                       Setoguchi T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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15-JUN-2002 (Rel.
Neighbor of COX4.
                                                                                          SEQUENCE FROM N.A.
                                                                                                                  NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam;
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AA; 23348 MW;
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                                                 and white; TISSUE-Liver; 2; PubMed=7751825; Kondo K., Setoguchi Y.,
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Rodentia;
                                                                                                                                Lagomorpha;
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52.4%;
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Pred. No. 1
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                                                                     MGD; MGI:106091;
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Tzung K.W., Ishimura-Oka K., Kihara
"Structure of the mouse cholesterol
Genomics 21:244-247(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Cytochrome P450 7A1 (Cholesterol 7-alpha-monooxygenase) (CYPVII)
(EC 1.14.13.17) (Cholesterol 7-alpha-hydroxylase).
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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Q64505;
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                     EMBL; L23754; AAA68867.1; MGD; MGI:106091; Cyp7a1. InterPro; IPR001128; Cytoo Pfam; PF00067; P450; 1.
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Oxidoreductase; Monooxygenase; Electron transport; Membrane; Microsome; Endoplasmic reticulum; Cholesterol metabolism; NAI BINDING 441 441 HEME (BY SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                        CATALYTIC ACTIVITY: Cholesterol + NADPH + O(2) hydroxycholesterol + NADP(+) + H(2)O. PATHWAY: FIRST AND RATE-LIMITING STEP IN THE CCCHOLESTEROL TO BILE ACIDS.
SUBCELLULAR LOCATION: Membrane-bound. Endoplasm SIMILARITY: BELONGS TO THE CYTOCHROME P450 FAMI
                                                                                                                                                                                                                                                        European Bioinformatics Institute.
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PATHWAY: FIRST AND RATE-LIMITING STEP IN THE CONVENTION OF THE CONVENTION OF THE CONVENTION OF THE CONVENTION OF THE CONVENTION OF T
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     PF00067;
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10; Conserv
                                                                                                                                                  pean Bioinformatics Institute. There are no rest non-profit institutions as long as its content and this statement is not removed. Usage by an requires a license agreement (See http://www.isban email to license@isb-sib.ch).
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Sciurognathi; Muridae;
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7 alpha-hydroxylase
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                                                                                                                                                                        (See http://www.isb-sib.ch/announce/
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                                                                                                                                                                                                                                                                                                                                                             Endoplasmic reticulum P450 FAMILY.
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P18125; 1
                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=Sprague-Dawley;
MEDLINB=90743699; PubMed=2335522;
MEDLINB=90743699; PubMed=2335522;
Jelinek D.F., Andersson S., Slaughter C.A., Russell D.W.;
"Cloning and regulation of cholesterol 7 alpha-hydroxylase, limiting enzyme in bile acid biosynthesis.";
J. Biol. Chem. 265:8190-8197(1990).
                           STRAIN=Sprague-Dawley;
MEDLINE-94292507; PubMed-8021257;
                                                                                                Nishimoto M., Gotoh O., Okuda K., Noshiro "Structural analysis of the gene encoding hydroxylase, the key enzyme for bile acid
                                                                                                                                                                                    Noshiro M., Nishimoto M., Okuda K.;
"Rat liver cholesterol 7 alpha-hydroxylase.
regulation for circadian rhythm.";
J. Biol. Chem. 265:10036-10041(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Li Y.C., Wang D.P., Chiang J.Y.L.; "Regulation of cholesterol 7 alpha-hydroxylase in the liver. Clonin sequencing, and regulation of cholesterol 7 alpha-hydroxylase mRNA. J. Biol. Chem. 265:12012-12019(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalla; Eutheria; Rodentia;
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
16-CCT-2001 (Rel. 40, Last annotation update)
Cytochrome P450 7A1 (Cholesterol 7-alpha-monooxygenase)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Microsome; Endoplasmic reticulum; Cholesterol metabolism; BINDING 444 444 HEME (BY SIMILARITY). SEQUENCE 503 AA; 57258 MW; 51DB3C71D6C79791 CRC64;
                                                                                                                                                                                                                                                                                                      Noshiro M., Nishimoto M., Morohashi K., Okuđa K.; "Molecular cloning of cDNA for cholesterol 7 alpha-hydroxylase rat liver microsomes. Nucleotide sequence and expression."; FEBS Lett. 257:97-100(1989).
                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE=90033362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=Sprague-Dawley; TISSUE-Liver; MEDLINE=90307735; PubMed=1694852;
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                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE=91177904; PubMed=2007596;
                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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Oxidoreductase; Monooxygenase; Electron transport;
                                                       SEQUENCE
                                                                                                                                                                                                                                                MEDLINE=90277612; PubMed=1693613;
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Identification
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                                                       OF 1-325
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                                                                                    the key enzyme for bil
m. 266:6467-6471(1991).
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               Stroup
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                                                       FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                PubMed=2806567;
characterization
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66.7%;
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Sciurognathi; Muridae;
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of a putative
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biosynthesis.";
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; Murinae; Rat
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se mRNA.";
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RESULT 9
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ID CP7A_C
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DT 01-NOV
DT 01-NOV
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EMBL: J02926;
EMBL: J05430;
EMBL: J05460;
EMBL: M59189;
EMBL: M59184;
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Blochim. Blophys. Acta 1132:337-339(1992).
Blochim. Blophys. Acta 1132:337-339(1992).
-I- CATALYTIC ACTIVITY: Cholesterol + NADPH + O(2) = 7-alpha-hydroxycholesterol + NADP(+) + H(2)O.
-I- ENZYME REGULATION: INHIBITION OF ACTIVITY BY BILE ACID FEI-LENTYMAY: FIRST AND RATE-LIMITING STEP IN THE CONVERSION OF ACTIVITY BY BILE ACID FEI-LENTYMAY: FIRST AND RATE-LIMITING STEP IN THE CONVERSION OF
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Chiang J.Y., Yang T.P., Wang D.P.;
"Cloning and 5'-flanking sequence of a rat cholesterol 7 alpha.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 1-26 FROM N.A.
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Jelinek D.F., Russell D.W.; 
"Structure of the rat gene encoding cholesterol 
Biochemistry 29:7781-7785(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 1-27 FROM STRAIN-Sprague-Dawley;
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P46634;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INDUCTION: BY CHOLESTYRAMINE AND CHOLESTEROL. SIMILARITY: BELONGS TO THE CYTOCHROME P450 FAMILY.
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SUBCELLULAR LOCATION: Membrane-bound. Endoplasmic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; U01962; AAA21144.2;
; X17595; CAB57878.1;
; Z14108; CAA78481.1;
A35376; A35376.
                                                                                                                                                                                                                                       369
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TE; PS00086; CYTOCHROME_P450; 1.
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                                                                                                                                                                                                                                                                                     DETNHLEDTRRNINK 19
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269:17502-17507(1994).
                                                                                                        STANDARD;
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371 T
; 56882 MW;
32, Created)32, Last sequence update)39, Last annotation updat
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66.7%;
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T -> S (IN REF. 5).
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Pred. No. 4
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  update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BILE ACID FEEDBACK.
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RESULT 10
CP7A_HUMAN
ID CP7A_H
AC P22680
DT 01-JUN
DT 30-MAY
DE CYtoch
DE (EC 1:
GN CYP7A1
GN CYP7A1
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RN [1]
RP SEQUEN
RX MEDLIN
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
                                                                                                                                                                                                                                                                               (bc. CYP7A1 OR CYP/.
Homo sapiens (Human).
Homo sapiens (Human).
Chordata; Metazoa; Chordata; Metazoa; Primates;
                                                                                                                                                                                                                                                                                                                                                                                  P22680;
P12680;
P1-AUG-1991 (Rel. 19, Created)
P1-JUN-1994 (Rel. 29, Last sequence update)
P1-JUN-1994 (Rel. 39, Last annotation update)
P1-JUN-1994 (Rel. 39, Last annotation update)
P1-JUN-1994 (Rel. 39, Last annotation update)
P1-JUN-1994 (Rel. 39, Last annotation update)
P1-JUN-1994 (Rel. 39, Last annotation update)
P1-JUN-1994 (Rel. 19, Last sequence update)
P1-JUN-1994 (Rel. 19, Created)
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P1-JUN-1994 (Rel. 19, Created)
P1-JUN-1994 (Rel. 19, Last sequence update)
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PROSITE; PS00086; CYTOCHROME_P450; 1.
Oxidoreductase; Monooxygenase; Electron transport; Membrane; Microsome; Endoplasmic reticulum; Cholesterol metabolism; NAI MICROSOME; Endoplasmic reticulum; Cholesterol metabolism; NAI MICROSOME; Endoplasmic reticulum; Cholesterol metabolism; NAI MICROSOME; ENGOPLASTITY).
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"Genomic Cloning, sequencing, and analysis of the ham

7 alpha-hydroxylase gene (CYP7).";

Arch. Biochem. Biophys. 306:451-460(1993).

1- CATALYTIC ACTIVITY: Cholesterol + NADPH + O(2) =

hydroxycholesterol + NADP(+) + H(2)0.

1- PATHWAY: FIRST AND RATE-LIMITING STEP IN THE CONV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytochrome P450 7A1 (Cholesterol 7-alpha-monooxygenase) (EC 1.14.13.17) (Cholesterol 7-alpha-hydroxylase). CYP7A1 OR CYP7.
                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE=93176797; PubMed=8439551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPRO01128; Cytoc
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-!- SUBCELLULAR LOCATION: Membrane-bound. Endoplasmic reticulum-
-!- SIMILARITY: BELONGS TO THE CYTOCHROME P450 FAMILY.
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NCBI_TaxID=10029;
                                                                                                          Nishimoto M., Noshiro "Structure of the gene hydroxylase.";
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     MEDLINE-90346120;
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                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                          NCBI_TaxID=9606;
                                                                                    Biochim.
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                                                                                                                                      M., Okuda
e encoding
                                                                                    1172:147-150(1993)
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Pred. No. 4
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                                                                                                                                            human
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CONFLICT
SEQUENCE
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RAZAM W.G., Chiang J.Y.;

Polymorphisms of human cholesterol 7 alpha-hydroxylase.";

Biochem. Biophys. Res. Commun. 185:588-59(1992).

-I- CATALYTIC ACTIVITY: Cholesterol + NADPH + O(2) = 7-alpha-hydroxycholesterol + NADP(+) + H(2)O.

-I- PATHWAY: FIRST AND RATE-LIMITING STEP IN THE CONVERSION OF CHOLESTEROL TO BILE ACIDS.

-I- SUBCELLULAR LOCATION: Membrane-bound. Endoplasmic reticulum.

-I: SIMILARITY: BELONGS TO THE CYTOCHROME P450 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BINDING
VARIANT
TISSUE-Mammary gland;
MEDLINE-94120413; PubMed-8290962;
Zou Z., Anisowicz A., Hendrix M.J
Rafidi K., Seftor E., Sager R.;
"Maspin, a serpin with tumor-supp
                                                                                                                                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                              Maspin precursor SERPINB5 OR PI5.
                                                                                                                                                                                                                                                                                          01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
16-CCT-2001 (Rel. 40, Last annotation updat maspin precursor (Protease inhibitor 5).
                                                                                                                                                                                                                                                                                                                                                                                                  MASP_HUMAN
P36952;
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EMBL; M93133; AAA58435.1;
PIR; JH0659; JH0659.
PIR; S29818; S29818.
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MEDLINE-92304280; PubMed-1610352;
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"Molecular cloning and sequence analysis of cDNA encoding human cholesterol 7 alpha-hydroxylase.";
                                                                                                                           SEQUENCE FROM N.A.
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tumor-suppressing activity
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D -> N (IN REF. 2).
D -> S (IN REF. 2).
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um; Cholesterol metabolism; NADP;
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                                                                       01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation updat
Maspin precursor (Protease inhibitor 5).
SERPIRBS OR PIS OR SPIS OR SPI7.
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                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genew; HGNC:8949; SERPINB5 MIM; 154790; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                               NCBI_TaxID=10090;
                                                                Mus musculus (Mouse)
                                                                                                                                            MASP_MOUSE
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InterPro; IPR000215; S
Pfam; PF00079; serpin;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pemberton P.A., Wong D.T., Gibson H.L., Kiefer M.C. Fitzpatrick P.A., Sager R., Barr P.J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                epithelial cells.";
Science 263:526-529(1994).
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PROSITE; PSO0284; SERPIN; 1.
                      Umekita Y., Hilpakka R.A., Liao S., "Rat and human maspins: structures, and mutation in prostate cancer cell
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                                                                                                                 STRAIN-Sprague-Dawley; TISSUE-Vac
MEDLINE-97218145; PubMed-9065806;
                                                                                                                                                                                                                                         Eukaryota; Metazoa;
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NCBI_TaxID=10116;
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Eukaryota; Metazoa; Chordata;
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SUBCELLULAR LOCATION: Extracellular.
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
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MEDLINE-96013887; PubMed-7589435; Barnes R.C., Worrall D.M.; "Identification of a novel human expression of leupin."; FEBS Lett. 373:61-65(1995).
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01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Squamous cell carcinoma antigen 2 (SCCA-2) (Leupin).
                                                                                                                                                                                 "A serine proteinase inhibitor locus duplication of the human squamous cel
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                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                   Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
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SUBCELLULAR LOCATION: Extracellular.
SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           519; 1HLE.
IPR000240; Maspin.
                                                                                                                                                                                                                                                                                                                                                                   Metazoa;
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                                                                                                                                                              roteinase inhibitor locus at 18q21.3 contains a tandem of the human squamous cell carcinoma antigen gene."; Acad. Sci. U.S.A. 92:3147-3151(1995).
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       SEQUENCE FROM N.A STRAIN=113 / 30;
                                                                                                                                                                          Clostridium botulinum Bacteria; Firmicutes;
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01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation updat
Botulinum neurotoxin type G precursor (EC 3
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"Molecular cloning of human squamous cell carcinoma antigen 1 gene and characterization of its promoter.";
Biochim. Biophys. Acta 1518:124-131(2001).
                                                                                                                                             Clostridium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00079; serpin; 1. SMART; SM00093; SERPIN; 1.
                                                                                                      NCBI_TaxID=1491;
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SIMILARITY: BELONGS TO THE SERPIN FAMILY. OV-SERPIN SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nitted (NOV-2001) to the EMBL/GenBank/DDBJ databases. FUNCTION: MAY ACT AS A PROTEASE INHIBITOR TO MODULATE THE HOST IMMUNE RESPONSE AGAINST TUMOR CELLS.
SUBCELLULAR LOCATION: Cytoplasmic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           U19572; AAA92602.1;
U19574; AAA92602.1;
U19575; AAA92602.1;
U19575; AAA97553.1;
X89015; CAA61420.1;
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U19571; AAA92602.
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E 354 355 REACTIVE BOND.
E 390 AA; 44854 MW; 04E213CD892587D5 CRC64;
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50.0%;
                                                                                                                                                                             Clostridia;
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Pred. No.
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                                                                                                                                                                          Clostridiales; Clostridiaceae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1296
                                                                                                                                                                                                                                                                                                             update)
(EC 3.4
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5.2;
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Search completed: July 11,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell K., Collins M.D., East A.K.;

"Nucleotide sequence of the gene coding for Clostridium botulinum (Clostridium azgentinense) type G neurotoxin: genealogical comparison with other clostridial neurotoxins.";

Biochin. Biophys. Acta 1216:487-491(1993).

11 BIOCHINUS TOXIN ACTS BY INHIBITING NEUROTRANSMITTER RELEASE IT BINDS TO PERIPHERAL NEURONAL SYNAPSES, IS INTERNALIZED AND NOVES BY RETROGRADE TRANSPORT UP THE AXON INTO THE SPINAL CORD WHERE IT CAN MOVE BETWEEN POSTSYNAPTIC AND PRESYNAPTIC NEURONS. IT INHIBITS NEUROTRANSMITTER RELEASE BY ACTING AS A ZINC
                                                                                                                                                                                                                                                                 ProDom; PD001963; Bontoxilysin; 1.
PROSITE; PS00142; ZINC_PROTEASE; 1
                                                                                                                                                                                                                                                                                                                                                                           EMBL; X74162; CAA52275.1;
HSSP; P10845; 3BTA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -i- SUBCELLULAR LOCATION: Secreted (By similarity).

-i- MISCELLANEOUS: THERE ARE SEVEN ANTIGENICALLY DI
BOTULLINUM NEUROTOXIN: TYPES A, B, C1, D, E, F,

-i- SIMILARITY: BELONGS TO PEPTIDASE FAMILY M27.
                                                                                                                                                                                                                                                                                                PRINTS;
                                                                                                                                                                                                                                                                                                                                                           MEROPS; M27
                                                                                                                                                                        ACT_SITE
                                                                                                                                                                                                                                     Neurotoxin;
INIT_MET
                                                                                                                                                                                                                                                                                                                               InterPro; IPR000395;
InterPro; IPR000130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=94092745; PubMed=8268233;
                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATALYTIC ACTIVITY: Limited hydrolysis of proteins of the neuroexocytosis apparatus, synaptobrevins, SNAP25 or syntaxin. No detected action on small molecule substrates. SUBUNIT: DISULFIDE-LINKED HETERODIMER OF A LIGHT CHAIN (L) AND A HEAVY CHAIN (H). THE LIGHT CHAIN HAS THE PHARMACOLOGICAL ACTIVITY, WHILE THE N-AND C-TERMINAL OF THE HEAVY CHAIN MEDIATE CHANNEL FORMATION AND TOXIN BINDING, RESPECTIVELY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENDOPEPTIDASE
554
                                                                                                                                                                                                                                                                                                               Pro; IPR000130; Zn_MTpeptdse. PF01742; Peptidase_M27; 1.
                               1 VERVDFTNHLEDTRRNINK . 19
                                                              Similarity
9; Conserv
                                                                                                                                                                                                                                                                                                   PR00760;
IENLOLTNSLNDALRNNNK
                                                                                                                                                                                                                                                    Hydrolase;
                                                              Conservative
                                                                                                                         AA;
                                                                                                                                                                                                                                                                                                  BONTOXILYSIN.
                                                                                                                                         0
441
1296
229
230
233
449
                                                                              46.0%;
47.4%;
                                                                                                                                                                                                                                                                                                                                              Bontoxilysin
                                                                                                                          149013 MW;
                                                                                                                                                                                                                                   Metalloprotease; Zinc.
BY SIMILARITY.
                                                                           .48;
                                                                                                                                                   BOTULINUM NEUROTOXIN G, LIGHT-CHAIN.
BOTULINUM NEUROTOXIN G, HEAVY-CHAIN.
ZINC (CATALYTIC) (BY SIMILARITY).
BY SIMILARITY.
ZINC (CATALYTTA')
                                                            2;
 572
                                                                           Pred.
                                                                                          Score 46;
                                                                                                                                        ZINC (CATALYTIC) (BY INTERCHAIN (PROBABLE)
                                                              Mismatches
                                                                                                                          DC8E47E15F665C31
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                                                              8
                                                                                           Length 1296;
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